PART E - NETWORK ELEMENTS

1. GENERAL

On August 21, 2003, the FCC released its Order in Docket No. CC 01-228, *In the Matter of the Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers* ("Triennial Review Order"). The rates, terms, and conditions set forth in this Attachment reflect implementation of Applicable Law, including the Triennial Review Order.

1.1 DEFINITIONS

1.1.1 "Commingle" means the act of Commingling.

1.1.2. "Commingling" means the connecting, attaching, or otherwise linking of an unbundled network element, or a combination of unbundled network elements, to one or more facilities or services that KMC has obtained at wholesale from Sprint or the combining of an unbundled network element, or a combination of unbundled network elements with one or more such facilities or services.

1.1.3 "Copper Loop" is a stand-alone local loop comprised entirely of copper wire or cable. Copper Loops include two-wire and four-wire analog voice-grade copper Loops, digital copper Loops *(e.g.*, DS0s and integrated services digital network lines), as well as two-wire and four-wire copper Loops conditioned to transmit the digital signals needed to provide digital subscriber line services, regardless of whether the copper Loops are in service or held as spares. The copper Loop includes attached electronics using time division multiplexing technology, but does not include Packet Switching capabilities.

1.1.4 "Dark Fiber Loop" is fiber within an existing fiber optic cable that has not yet been activated through optronics to render it capable of carrying communications services.

1.1.5 "Demarcation Point" is that point on the loop where Sprint's control of the facility ceases, and the End User Customer's control of the facility begins.

1.1.6 "DS1 Loop" is a digital local Loop having a total digital signal speed of 1.544 megabytes per second. DS1 Loops include, but are not limited to, two-wire and four-wire copper Loops capable of providing high-bit rate digital subscriber line services, including T1 services.

1.1.7 "DS3 Loop" is a digital local Loop having a total digital signal speed of 44.736 megabytes per second.

1.1.8 "Fiber-to-the-home Loop" ("FTTH Loop") means a local loop consisting entirely of fiber optic cable, whether dark or lit, and serving an end-user's customer premises.

1.1.9 "High Frequency Portion of the local Loop" ("HFPL") is defined as the frequency range above the voice band on a copper Loop facility that is being used to carry analog circuit-switched voice band transmissions provided by Sprint to the end-user customer.

1.1.10 "Hybrid Loop" means a local Loop comprised of both fiber optic cable, usually in the feeder plant, and copper wire or cable usually in the distribution plant.

1.1.11 "Non-qualifying Service" means a service that is not a Qualifying Service.

1.1.12 "Packet Switching Capabilities" is the routing or forwarding of packets, frames, cells, or other data units based on address or other routing information contained in the packets, frames, cells or other data units, and the functions that are performed by the digital subscriber line access multiplexers, including but not limited to the ability to terminate an end-user customer's copper loop (which includes both a low-band voice channel and a high-band data channel, or solely a data channel); the ability to forward the voice channels, if present, to a circuit switch or multiple circuit switches; the ability to extract data units from the data channels on the loops; and the ability to combine data units from multiple loops onto one or more trunks connecting to a packet switch or packet switches.

1.1.13 "Qualifying Service" means a telecommunications service that competes with a telecommunication service that has traditionally been the exclusive or primary domain of incumbent LECs, including but not limited to, local exchange service, such as plain old telephone service, and access services, such as digital subscriber line services and high-capacity circuits.

1.1.14 "Common Transport" provides a local interoffice transmission path between End Office Switches, between End Office Switches and Tandem Switches and between Tandem Switches in Sprint's network. Common Transport is shared between multiple customers and is required to be switched at the Tandem Switch.

1.1.15 "Dedicated Transport" provides a local interoffice transmission path between Sprint Wire Centers or switches. Dedicated Transport is limited to the use of a single customer and does not require switching at a Tandem Switch.

1.1.16 "Enhanced Extended Link" ("EEL") for purposes of this Agreement refers to the combination of unbundled network elements, specifically NID, Loop, multiplexing (MUX) if necessary and Dedicated Transport, in the Sprint Network.

1.1.17 "Local Loop" refers to a transmission facility between the main distribution frame [cross-connect], or its equivalent, in a Sprint Central Office or wire center, and up to the loop demarcation point (e.g. Network Interface Device) at a customer's premises. This includes all functions, and capabilities of such transmission facility, including the Network Interface Device ("NID"), electronics, optronics and intermediate devices (including repeaters and load coils) used to establish the transmission path to the customer premises as well as any inside wire owned or controlled by Sprint that is part of

the transmission path. Local loops include copper loops, hybrid loops, FTTH loops, DS1 loops, DS3 loops and Dark Fiber Loops.

1.1.18 "Batch Hot Cut Process" is defined as a process by which the incumbent LEC simultaneously migrates two or more loops from one carrier's local circuit switch to another carrier's local circuit switch, giving rise to operational and economic efficiencies not available when migrating loops from one carrier's local circuit switch to another carrier's local circuit switch on a line-by-line basis.

1.1.19 "Line splitting" Line splitting is the process in which one competitive LEC provides narrowband voice service over the low frequency portion of a copper loop and a second competitive LEC provides digital subscriber line service over the high frequency portion of that same loop.

1.1.20 "Point of Technically Feasible Access" is any point in the incumbent LEC's outside plant where a technician can access the copper wire within a cable without removing a splice case. Such points include, but are not limited to, a pole or pedestal, the serving area interface, the network interface device, the minimum point of entry, any remote terminal, and the feeder/distribution interface. An incumbent LEC shall, upon a site-specific request, provide access to a copper subloop at a splice near a remote terminal. The incumbent LEC shall be compensated for providing this access in accordance with §§ 51.501 through 51.515.

1.1.21 "Network Interface Device" or "NID" is defined as any means of interconnection of customer premises wiring to the incumbent LEC's distribution plant, such as a cross-connect device used for that purpose. An incumbent LEC shall permit a requesting telecommunications carrier to connect its own loop facilities to on-premises wiring through the incumbent LEC's network interface device, or at any other technically feasible point.

1.1.22 "Local Circuit Switching" is defined as follows: (i) Local circuit switching encompasses all line-side and trunk-side facilities, plus the features, functions, and capabilities of the switch. The features, functions, and capabilities of the switch shall include the basic switching function of connecting lines to lines, lines to trunks, trunks to lines, and trunks to trunks. (ii) Local circuit switching includes all vertical features that the switch is capable of providing, including custom calling, custom local area signaling services features, and Centrex, as well as any technically feasible customized routing functions.

2. TERMS AND CONDITIONS

2.1. Pursuant to the following terms, Sprint will unbundle and separately price and offer Unbundled Network Elements ("UNEs") such that KMC will be able to subscribe to and interconnect to whichever of these unbundled elements KMC requires for the purpose of offering Qualifying Services or a combination of Qualifying and Non-Qualifying Services to its customers. To the extent KMC accesses and uses an unbundled network element pursuant to section 251(c)(3) of

the Act to provide a qualifying service KMC may use the same unbundled network element to provide non-qualifying services. KMC shall pay Sprint for the UNEs provisioned and shall pay the recurring and non-recurring charges which shall be TELRIC rates and consistent with Applicable Law or as otherwise agreed to by the Parties. Sprint will continue to offer the UNEs enumerated below subject to further determinations as to which UNEs ILECs are required to offer under the Act, at which time the Parties agree to modify this section pursuant to the obligations set forth in Part B, Section 4 of this Agreement.

2.2. Sprint shall not impose limitations, restrictions, or requirements on requests for, or the use of, unbundled network elements for the service a requesting telecommunications carrier seeks to offer. Sprint shall not deny access to an unbundled network element or a combination of unbundled network elements on the grounds that one or more of the elements: (1) is connected to, attached to, linked to, or combined with, a facility or service obtained from Sprint; or (2) shares part of Sprint's network with access services or inputs for non-qualifying services.

2.3. The quality of an unbundled network element, as well as the quality of the access to such unbundled network element, that an incumbent LEC provides to a requesting telecommunications carrier shall be at least equal in quality to that which Sprint provides to itself.

2.3.1. If Sprint fails to meet this requirement, Sprint must prove to the state commission that it is not technically feasible to provide the requested unbundled network element, or to provide access to the requested unbundled network element, at a level of quality that is equal to that which Sprint provides to itself.

3. UNBUNDLED NETWORK ELEMENTS

3.1. Sprint shall offer UNEs to KMC for the purpose of offering a Qualifying Service or a combination of Qualifying and non-qualifying services to KMC subscribers. KMC may not access UNEs for the sole purpose of providing Non-qualifying Services.

3.2. KMC may use one or more UNEs or combination of UNEs to provide any feature, function, capability, or service option that such UNE(s) is (are) technically capable of providing, except as otherwise limited herein.

3.3. Each UNE provided by Sprint to KMC shall be at Parity with the quality of design, performance, features, access, functions, capabilities and other characteristics, that Sprint provides to itself, Sprint's own subscribers, to a Sprint Affiliate or to any other Telecommunications Carrier requesting access to that UNE.

3.4. Sprint shall permit KMC to connect KMC's facilities or facilities provided to

KMC by third parties with each of Sprint's UNEs at any point designated by KMC that is a Point of Technically Feasible Access.

4. BONA FIDE REQUEST PROCESS

4.1. KMC may identify additional or revised Network Elements as necessary to provide Telecommunications Services to its subscribers, to improve network or service efficiencies or to accommodate changing technologies, subscriber demand, or other requirements.

4.2. KMC will request such additional or revised Network Elements in accordance with the Bona Fide Request process described in §4 of this Part E. Additionally, if Sprint provides any Network Element that is not identified in this Agreement, to itself, to its own subscribers, to a Sprint Affiliate or to any other entity, Sprint shall make available the same Network Element to KMC on terms and conditions no less favorable to KMC than those provided to itself or to any other party.

4.3. Sprint shall promptly consider and analyze access to categories of UNEs not covered in this Agreement and requests where facilities and necessary equipment are not available with the submission of a Network Element Bona Fide Request hereunder. The UNE Bona Fide Request process set forth herein does not apply to these services requested pursuant to FCC Rule § 51.319, as amended except as necessary to develop ordering and provisioning processes.

4.4. Sprint shall promptly consider and analyze access to UNEs or combinations of UNEs not specifically covered in this Agreement with the submission of a Bona Fide Request ("BFR") hereunder.

4.5. A BFR shall be submitted in writing on the Sprint Standard BFR Form and shall include a clear technical description of each request.

4.6. KMC may cancel a BFR at any time. If KMC cancels the BFR, KMC shall pay Sprint's reasonable and demonstrable costs of processing and/or implementing the UNE Bona Fide Request up to the date of cancellation.

4.7. Within five (5) calendar days of its receipt, Sprint shall acknowledge receipt of the BFR and in such acknowledgement advice KMC of the need for any further information needed to process the Bona Fide Request..

4.8. Except under extraordinary circumstances, within thirty (30) calendar days of its receipt of a BFR Sprint shall provide to KMC a preliminary analysis of such BFR. The preliminary analysis shall confirm that Sprint will offer access to the UNE or will provide a explanation that access to the UNE is not technically feasible.

4.9. Upon receipt of the preliminary analysis, KMC shall, within thirty (30) calendar days, notify the receiving Party, in writing, of its intent to proceed or not to proceed.

4.10. The receiving Party shall promptly proceed with the BFR upon receipt of written authorization from the requesting Party. When it receives such authorization, the

receiving Party shall promptly develop the requested services, determine their availability, calculate the applicable TELRIC compliant prices, BFR development and processing costs, terms and conditions by which the Request shall be made available, and establish installation intervals. Unless KMC agrees otherwise, the UNE requested must be priced in accordance with the pricing principals of the Act, FCC and/or the State Commission.

4.11. As soon as feasible, but not more than forty-five (45) calendar days after its receipt of authorization to proceed with developing the BFR, Sprint shall provide to KMC a BFR Quote which will include, at a minimum, a description of each service or UNE, the date of availability, the applicable TELRIC compliant rates and the installation intervals.

4.12. Within thirty (30) calendar days of its receipt of the BFR Quote, the requesting Party must either confirm, in writing, its order for the BFR pursuant to the BFR Quote or if a disagreement arises, seek resolution of the dispute under the Dispute Resolution procedures in Part B of this Agreement.

4.13. New network elements established via the BFR process shall be incorporated in the terms of the Agreement and KMC's access to the specified network elements shall be co-terminus with the terms of the Agreement.

4.14. If a Party to a BFR believes that the other Party is not requesting, negotiating or processing the BFR in good faith, or disputes a determination, or price or cost quote, such Party may seek resolution of the dispute pursuant to the Dispute Resolution provisions in Part B of this Agreement.

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6. NETWORK INTERFACE DEVICE

6.1. Apart from its obligation to provide the network interface device functionality as part of an unbundled loop or subloop, an incumbent LEC also shall provide nondiscriminatory access to the network interface device on as a standalone element on an unbundled basis, in accordance with section 251(c)(3) of the Act and this part. Sprint will offer unbundled access to the network interface devise element (NID). The NID is defined as any means of interconnection of end-user customer premises wiring to an incumbent LECs distribution plant, such as a cross connect device used for that purpose. This includes all features, functions, and capabilities of the facilities used to connect the loop to end-user customer premises wiring, regardless of the specific mechanical design.

6.2. The function of the NID is to establish the network demarcation point between a LEC (ILEC/KMC) and its subscriber. The NID provides a protective ground connection, protection against lightning and other high voltage surges and is

capable of terminating cables such as twisted pair cable.

6.3. When ordered on a standalone basis, KMC may connect its NID to Sprint's NID; may connect an unbundled loop to its NID; or may connect its own Loop to Sprint's NID. Sprint will provide one NID termination of each loop. If additional NID terminations are required, KMC may request them pursuant to the process detailed in Section 43 herein. Such NID connections are included when KMC provisions a Local Loop from Sprint.

6.4. Sprint will provide KMC with information that will enable their technician to locate end user inside wiring at NIDs terminating multiple subscribers. Sprint will dispatch a technician and tag the wiring at the KMC's request. In such cases the charges specified in Table One will apply.

6.5. The Sprint NID shall provide a clean, accessible point of connection for the inside wiring and for the distribution media and/or cross connect to KMC's NID and shall maintain a connection to ground that meets applicable industry standards. Each Party shall ground its NID independently of the other party's NID.

6.6. When requested, Sprint will provide NIDs separately from loops for a separate price as shown in Table One. A NID will be provided with each unbundled loop and is included in the loop pricing shown in Table One.

7. LOOP

7.1. Sprint will provide KMC access to Local Loops as defined in Part A including Copper Loops, Hybrid Loops, FTTH Loops, DS1 Loops, DS3 Loops, and Dark Fiber Loops. The following section includes the terms and conditions for Copper Loops, Hybrid Loops, FTTH Loops, DS1 Loops and DS3 Loops. Terms and conditions for the provision of Dark Fiber Loops are set forth in Section 20 of this Agreement. Terms and conditions for making any network modifications resulting from KMC's request for Local Loops is contained in Section 18.

8. MAINTENANCE, REPAIR, AND TESTING

8.1. Sprint shall provide, on a nondiscriminatory basis, physical loop test access points to KMC at the splitter, through a cross-connection to KMC's collocation space, or through a standardized interface, such as an intermediate distribution frame or a test access server, for the purpose of testing, maintaining, and repairing copper loops and copper subloops.

8.2. If Sprint seeks to utilize an alternative physical access methodology may request approval to do so from the Commission, but must show that the proposed alternative method is reasonable and nondiscriminatory, and will not disadvantage KMC's ability to perform loop or service testing, maintenance, or repair.

8.3. At KMC's request, and if technically feasible, Sprint will test and report trouble

on conditioned loops for all of the line's features, functions, and capabilities, and will not restrict its testing to voice-transmission only. Testing shall include Basic Testing and Cooperative Testing. Basic Testing shall include simple metallic measurements only, performed by accessing the loop through the voice switch.

8.3.1. Loop Acceptance Process. This process shall be as follows: [

8.3.1.1. Sprint will perform the appropriate pre-service tests to ensure KMC service is delivered to the appropriate connecting point. Testing will be scheduled to occur on the Plant Test Date (PTD) to test the Sprint portion of the requested service consistent with the following:

(A) The Sprint technician is responsible to install, option and adjust all necessary equipment at the customer location according to engineering specifications.

(B) Sprint will perform remote or on-site testing as required.

(C) If remote testing, the Sprint technician will contact the KMC Operations Center to test and accept loops that includes bridging the access customer on line for cooperative testing of the complete circuit. Testing must obtain an 'end to end' test of Sprint provided equipment and facilities.

(D) If remote testing is not available, the Sprint technician will contact a technician in the controlling office to bridge on the access customer to perform cooperative testing of the complete circuit, to a point as close as possible to the access customer equipment in order to obtain an 'end to end' test of Sprint provided equipment and facilities.

8.3.1.2. Acceptance Test on the Due Date: Cooperative testing between Sprint and KMC on Due Date (DD), which normally will be performed remotely, unless the service is not equipped with appropriate device or the test fails to meet acceptance criteria, in which case on-site testing will be required. Sprint will advise KMC at completion of the conversion or turn up of new services in order for KMC to accept or reject the services being provisioned. The process shall allow that if KMC does not test and accept within six (6) business hours on the due date, Sprint shall leave the loop in place as accepted and initiate billing.

8.3.1.3. Once a loop is accepted and/or turned over to KMC, the loop is to remain in place and capable of passing traffic until disconnected by KMC. Billing KMC for service shall begin upon KMC acceptance of the loop or, as provided in § 2.10.9.2, on the Due Date if KMC fails to be available on the scheduled date of acceptance testing to complete the acceptance test.

Notwithstanding the foregoing, if KMC tests the new service within twenty-four (24) hours of the acceptance, and it fails to meet the acceptance criteria based on the type of service and is not working as installed, the service shall be deemed to have failed the installation and the acceptance test and billing shall not begin until such service meets the acceptance criteria.

8.3.2. Basic Testing includes all testing that Sprint normally performs when it provisions services for its end users. Sprint shall perform all its standard pre-service testing prior to the completion of the service order.

8.3.3. Cooperative testing will be provided by Sprint at KMC's expense. Sprint technicians will try to contact KMC's representative at the conclusion of installation. If the KMC does not respond within 3 minutes, Sprint may, in its sole discretion, abandon the test and KMC will be charged for the test.

8.3.4. Network Testing.

8.3.4.1. Systems and Process Testing. Sprint shall cooperate with KMC upon KMC's request to use a system, to ensure that all operational interfaces and processes are in place and functioning properly. The Parties shall develop mutually testing procedures that simulate actual operational procedures and systems interfaces to the greatest extent possible.

8.3.5. Sprint will charge KMC at the rates set out on Table One, when the location of the trouble on a KMC-reported ticket is determined to be in KMC's network or on the KMC end user's side of the Demarcation Point.

8.3.6. Trouble Isolation: When a trouble is reported by a subscriber served through a UNE, KMC will test its network to identify any problems. If no problems are identified with the KMC network, KMC will open a trouble report with Sprint. Sprint shall then test its portion of the network and perform repairs as required in the time frames set forth below in this Agreement.

8.3.7. KMC will coordinate combined testing or repair activities until trouble is resolved. Sprint shall provide repair updates to KMC.

8.3.8. Systems Interfaces and Information Exchanges

8.3.8.1. The Parties agree to work cooperatively to establish a real-time electronic interfaces by KMC to Sprint's maintenance systems and databases for trouble management and reporting. Implementation of the Electronic Interface shall occur within one-hundred twenty (120) days of the Execution of this Agreement or of the KMC request, whichever is later. This

interface shall be seamless and transparent to KMC personnel working through KMC's systems.

8.3.8.2. An electronic bond will be a system-to-system connection with immediate update capability. In no way shall this interface cause KMC personnel to use Sprint systems via remote hook up or any other means of access.

8.3.8.3. This interface shall allow KMC personnel to perform the following functions for KMC subscribers; (i) enter trouble reports in the Sprint maintenance systems for an KMC subscriber; (ii) retrieve and track current status on all KMC subscriber trouble reports; and (iii) receive automated notification of case closure.

8.3.8.4. Sprint agrees to develop and implement the electronic interfaces described above based on the trouble administration industry standards developed by the ECIC forum, specifically ANSI standards T1.227 and T1.228. The Parties shall negotiate a joint implementation and test plan in compliance with the ANSI T1.227 and T1.228 standards.

8.3.8.5. Once the electronic Gateway is established between Sprint and KMC, Sprint agrees that KMC may report troubles directly to the Sprint repair/maintenance center for residential or business subscribers, unless otherwise agreed to by KMC. Until such a Gateway is established, KMC may report troubles directly to the Sprint repair/maintenance centers for residential and business subscribers.

8.3.8.6. If systems interfaces are temporarily out of service or not yet in place, Sprint shall provide to KMC the ability to obtain the status on open maintenance trouble reports via telephone or by another interface as mutually agreed by the Parties. Sprint agrees to provide the status of residence and small business trouble reports upon KMC's request.

8.3.9. Sprint agrees to provide to KMC the status for open maintenance trouble reports for large business subscribers at KMC's request.

8.3.10. Sprint agrees to proactively advise KMC of any Central Office failure that is known at the time of any inquiry or trouble report. Sprint agrees to continue to work with KMC toward implementing a process to meet KMC's requirements for notification of Switch failures as soon as possible.

8.3.11. Sprint agrees to provide a repair commit time on all residences and small business trouble reports.

8.4. Analog Loop Capabilities

8.4.1. Analog loops facilitate the transmission of voice grade signals in the 300-3000 Hz range and terminate in a 2-wire or 4-wire electrical interface at the KMC's end user's premises. KMC shall not install equipment on analog Loops that exceeds the specified bandwidth.

8.4.2. Sprint will provide analog Loops as Copper Loops, Hybrid Loops, and where required, FTTH Loops in accordance with the Applicable Law.

8.4.3. Where KMC's request would require that Sprint trench new facilities, KMC's request will be processed through the ICB process. Notwithstanding the foregoing, Sprint will provide routine network modifications as provided herein. KMC agrees to reimburse Sprint for the actual cost of the non-routine modifications necessary to make the alternative arrangements available. In addition to the non-recurring, actual costs for the non-routine modifications, KMC agrees to pay Sprint the recurring rates set forth in Table One for an Analog Loop.

8.5. Digital Loops

8.5.1. Sprint will provide Digital Loops subject to Applicable Law. Digital Loops are Copper Loops over which KMC may deploy advanced services.

8.5.2. Sprint shall employ industry accepted standards and practices to maximize binder group efficiency through analyzing the interference potential of each loop in a binder group, assigning an aggregate interference limit to the binder group, and then adding loops to the binder group until that limit is met. Disputes regarding the standards and practices employed in this regard shall be resolved through the Dispute Resolution Process set forth in Part B of this Agreement.

8.5.3. Where KMC's request would require that Sprint trench new facilities, KMC's requests will be processed through the ICB process. Sprint will provide routine network modifications as provided herein. KMC agrees to reimburse Sprint for the actual cost of the non-routine modifications necessary to make the alternative arrangements available. In addition to the non-recurring, actual costs for the non-routine modifications, KMC agrees to pay Sprint the recurring rates set forth in Table One for an Digital Loop.

8.5.4. Reverse ADSL Loops. If KMC's ADSL Transmission Unit (including those integrated into DSLAMs) is attached to Sprint's Network and if an ADSL Copper Loop should start at an outside location, and is looped through a host or remote, and then to the subscriber, the copper plant from the outside location to the Sprint host or remote central office must be a facility dedicated to ADSL transmission only and not part of Sprint's regular feeder or distribution plant.

8.6. Digital Loops greater than 18K ft.

8.6.1. If KMC requests a Digital Loop, for which the effective loop length exceeds the xDSL standard of 18 kft, Sprint will provide a standard Digital Loop. Additional non-recurring charges for conditioning may apply. Additional conditioning charges are set forth in Table One of this attachment.

8.7. Adherence to National Industry Standards

8.7.1. In providing advanced service loop technology, Sprint shall allow KMC to deploy underlying technology that does not significantly interfere with other advanced services and analog circuit-switched voice band transmissions.

8.7.2. Until long term industry standards and practices can be established, a particular technology shall be presumed acceptable for deployment under certain circumstances. Deployment that is consistent with at least one of the following circumstances presumes that such loop technology will not significantly degrade the performance of other advanced services or impair traditional analog circuit-switched voice band services:

8.7.2.1. Complies with existing industry standards, including an industry-standard PSD mask, as well as modulation schemes and electrical characteristics;

8.7.2.2. Is approved by an industry standards body, the FCC, or any state commission or;

8.7.2.3. Has been successfully deployed by any KMC without significantly degrading the performance of other services.

8.7.2.4. Where KMC seeks to establish that deployment of a technology falls within the presumption of acceptability under paragraph 8.7.2.3, the burden is on Sprint to demonstrate to the Commission that KMC's proposed deployment meets the threshold for a presumption of acceptability and will not, in fact, significantly degrade the performance of other advanced services or traditional voice band services.

8.7.3. If a deployed technology significantly degrades other advanced services, the affected Party will notify the interfering party and give them a reasonable opportunity to correct the problem. The interfering Party will immediately stop any new deployment until the problem is resolved to mitigate disruption of other carrier services. If the affected parties are unable to resolve the problem, they will present factual evidence to the Commission for review and determination. If the Commission determines that the deployed technology is the cause of the interference, the deploying party will remedy the problem by reducing the number of existing customers utilizing the technology or by migrating them to another

technology that does not disturb.

8.7.4. When the only degraded service itself is a known disturber and the newly deployed technology is presumed acceptable pursuant to Section 8.7.2, the degraded service shall not prevail against the newly deployed technology.

8.7.5. If Sprint denies a request by KMC to deploy a technology, it will provide detailed, specific information providing the reasons for the rejection.

8.7.6. Parties agree to abide by national standards as developed by ANSI, i.e., Committee T1E1.4 group defining standards for loop technology. At the time the deployed technology is standardized by ANSI or the recognized standards body, the KMC will upgrade its equipment to the adopted standard within sixty (60) Days of the standard being adopted.

8.7.7. KMC shall meet the power spectral density requirement given in the respective technical references listed below:

8.7.7.1. For Basic Rate ISDN: Telcordia TR-NWT-000393 Generic Requirements for ISDN Basic Access Digital Subscriber Lines.

8.7.7.2. For HDSL installations: Telcordia TA-NWT-001210 Generic Requirements for High-Bit-Rate Digital Subscriber Lines. Some fractional T1 derived products operating at 768 kbps may use the same standard.

8.7.7.3. For ADSL: ANSI T1.413-1998 (Issue 2 and subsequent revisions) Asymmetrical Digital Subscriber Line (ADSL) Metallic Interface.

8.7.7.4. As an alternative to Section 6.6.7.1 KMC may meet the requirements given in ANSI document T1E1.4/2000-002R2 dated May 1, 2000. "Working Draft of Spectrum Management Standard", and subsequent revisions of this document.

8.8. Information to be Provided for Deployment of Advanced Services.

8.8.1. Upon request, Sprint shall provide to KMC:

8.8.1.1. information with respect to the spectrum management procedures and policies that Sprint uses in determining which services can be deployed;

8.8.1.2. information with respect to the rejection of KMC's provision of advanced services, together with the specific reason for the rejection; and

8.8.1.3. information with respect to the number of loops using advanced services technology within the binder and type of technology deployed on those loops.

8.8.2. In connection with the provision of advanced services, KMC shall provide to Sprint the following information on the type of technology that KMC seeks to deploy where KMC asserts that the technology it seeks to deploy fits within a generic Power Spectral Density (PSD) mask:

8.8.2.1. information in writing (via the service order) regarding the Spectrum Management Class (SMC), as defined in the T1E1.4/2000-002R2 Draft, of the desired loop so that the loop and/or binder group may be engineered to meet the appropriate spectrum compatibility requirements;

8.8.2.2. the SMC (i.e. PSD mask) of the service it seeks to deploy, at the time of ordering and if KMC requires a change in the SMC of a particular loop, KMC shall notify Sprint in writing of the requested change in SMC (via a service order);

8.8.2.3. to the extent not previously provided KMC must disclose to Sprint every SMC that the KMC has implemented on Sprint's facilities to permit effective Spectrum Management.

8.9. Broadband Services

8.9.1. When KMC seeks access to a hybrid loop for the provision of broadband services, Sprint shall provide KMC with nondiscriminatory access to the time division multiplexing features, functions, and capabilities of that hybrid loop, including DS1 or DS3 capacity (where impairment has been found to exist), on an unbundled basis to establish a complete transmission path between the incumbent LEC's central office and an end user's customer premises. This access shall include access to all features, functions, and capabilities of the hybrid loop that are not used to transmit packetized information.

8.10. Narrowband services

8.10.1. When KMC seeks access to a hybrid loop for the provision of narrowband services, Sprint may either:

8.10.1.1. Provide nondiscriminatory access, on an unbundled basis, to an entire hybrid loop capable of voice-grade service (*i.e.*, equivalent to DS0 capacity), using time division multiplexing technology; or

8.10.1.2. Provide nondiscriminatory access to a spare home-run copper loop serving that customer on an unbundled basis.

8.11. Hybrid Loops. Sprint will provide KMC access to Hybrid Loops for the provision of broadband and narrowband services as provided below. Sprint is not required to provide unbundled access to the packet switched features, functions, and capabilities of its Hybrid Loops.

8.11.1. When KMC requests access to a Hybrid Loop for the provision of broadband service, Sprint will provide KMC, on an unbundled basis, with non-discriminatory access to the time division multiplexing features, functions, and capabilities of that Hybrid Loop, including DS1 and DS3 capacity, to the extent the Commission or FCC has determined that impairment exists, to establish a transmission path between Sprint's Central Office and the KMC's end-user's premises.

8.11.2. When KMC requests access to a Hybrid Loop for the provision of narrowband services, Sprint will

8.11.2.1. Provide non-discriminatory unbundled access to the entire Hybrid Loop capable of providing voice-grade service (*i.e.* equivalent to DS0 capacity) using time division multiplexing, or

8.11.2.2. Provide non-discriminatory unbundled access to a spare Copper Loop serving that end-user.

8.12. Fiber-to-the-home Loop (FTTH Loop)

8.12.1. A fiber-to-the-home loop is a local loop consisting entirely of fiber optic cable, whether dark or lit, and serving a residential end user's customer premises.

8.12.2. New builds

8.12.2.1. Sprint will not provide non-discriminatory access to FTTH Loop on an unbundled basis when Sprint has deployed a FTTH Loop to an residential end-user's customer premises that was not previously served by any loop facility.

8.12.3. Overbuilds

8.12.3.1. Sprint will not provide non-discriminatory access to FTTH Loop on an unbundled basis when Sprint has deployed a FTTH Loop parallel to, or in replacement of, an existing loop facility. Notwithstanding the foregoing, when Sprint overbuilds, Sprint maintains an obligation to:

8.12.3.1.1. Maintain the existing Copper Loop connected to a particular customer premises after deploying FTTH Loop and provide non-discriminatory access to the Copper Loop on an unbundled basis unless Sprint has the retired the Copper Loop as set forth below.

8.12.3.1.2. If Sprint deploys FTTH Loop and maintains the existing Copper Loop, Sprint will restore the Copper Loop to serviceable condition upon request.

8.12.3.1.3. If Sprint deploys FTTH Loop and retires the existing Copper Loop, Sprint will provide non-discriminatory access to a 64 kilobits per second transmission path capable of voice grade service over the FTTH Loop.

8.12.3.2. Prior to retiring Copper Loop or Sub-loop Sprint will comply with the notice requirements set forth in 251(c)(5) of the Act, Sections 51.325 through 51.335 of the Code of Federal Regulations and applicable Commission requirements.

8.13. DS1 Loops.

8.13.1. Sprint will provide DS1 Loops pursuant to Applicable Law. The Parties agree to amend this Agreement and to abide by the Commission established transition plan for DS1 Loops that are operational on the date

the Commission or FCC makes a finding of no impairment..

8.14. DS3 Loops

8.14.1. Sprint will provide DS3 Loops pursuant to Applicable Law. The Parties agree to amend this Agreement and to abide by the Commission established transition plan for DS3 Loops that are operational on the date the Commission or FCC makes a finding of no impairment, KMC will transition the DS3 Loops to another service within a time frame established by the Commission or agreed to by the Parties. Notwithstanding the foregoing, DS3 Loops at a specific customer location shall be limited to a maximum of two unbundled DS3 Loops for any single customer location..

8.15. Dark Fiber Loops

8.15.1. Sprint will provide KMC Dark Fiber Loops on an unbundled basis pursuant to Applicable Law. The Parties agree to amend this Agreement and to abide by the Commission established transition plan for Dark Fiber Loop to a specific customer location. Specific terms and conditions for providing Dark Fiber Loops are contained in this Part of this Agreement.

8.16. Tag and Label

8.16.1. At KMC's request, Sprint will tag and label unbundled loops at the Network Interface Device (NID). Tag and label may be ordered simultaneously with the ordering of the Loop or as a separate service subsequent to the ordering of the Loop.

8.16.2. Sprint will include the following information on the label: order number, due date, KMC name, and the circuit number.

8.16.3. Tag and Label is available on the following types of Loops: 2- and 4-wire analog Loops, 2- and 4-wire xDSL capable Loops, 2- and 4-wire digital Loops, and DS1 4-wire Loops.

8.16.4. KMC must specify on the order form whether each Loop should be tagged and labeled.

8.16.5. The rates for Loop tag and label and related services are set forth on Table One. When ordered subsequent to the ordering of the Loop, a trip charge, set forth in Table One, may be billed in addition to the Tag and Label charges.

9. SUBLOOPS

9.1. Until such time as the Commission approves rates and Sprint establishes business processes, Sprint will offer unbundled access to copper subloops and subloops for access to multiunit premises wiring. Sprint will consider all requests for access to subloops through the ICB process due to the wide variety of interconnections

available and the lack of Sprint standards. A written response will be provided to KMC covering the interconnection time intervals, prices and other information based on the ICB process as set forth in this Agreement. No additional charges shall apply for preparation and response to this ICB request.

9.2. Copper Subloops. Sprint will make available access to copper subloops on an unbundled basis. A copper subloop is comprised entirely of copper wire or copper cable that acts as a transmission facility between any accessible terminal in Sprint's outside plant, including inside wire owned or controlled by Sprint, and the end-user premises. A copper subloop can also include intermediate devices, such as repeaters, used to establish the transmission path. Copper subloops can be used by KMC to provide voice-grade services as well as digital subscriber line services. Access to copper subloops is subject to the collocation provisions of this Agreement. Copper subloop consists of the distribution portion of the copper loop.

9.2.1. An accessible terminal is any point on the loop where technicians can access a copper wire within the cable without removing a splice case. Such points include, but are not limited to, a pole or pedestal, the serving area interface, the network interface device, the minimum point of entry, any remote terminal, and the feeder/distribution interface.

9.3. Multiunit premises wiring. Sprint will make available to KMC access to subloops for access to multiunit premises wiring on an unbundled basis. The subloop for access to multiunit premises wiring is defined as any portion of the loop that it is technically feasible to access at a terminal in the incumbent LEC's outside plant at or near a multiunit premises, including inside wire. Inside wire is wire owned or controlled by Sprint at a multiunit customer premises between the minimum point of entry and the point of demarcation.

9.3.1. The point of demarcation shall be established at the Point of Technically Feasible Access . Such points include, but are not limited to, a pole or pedestal, the NID, the minimum point of entry, the single point of interconnection, and the feeder/distribution interface.

9.3.2. Upon request for interconnection at a multiunit premises where Sprint owns, controls, or leases wiring, Sprint will provide a single point of interconnection that is suitable for use by multiple carriers. This obligation is in addition to Sprints obligations, to provide ondiscriminatory access to a subloop for access to multiunit premises wiring, including any inside wire, at any technically feasible point. If the Parties do not agree on appropriate terms, conditions and rates for the single point of interconnection to multiunit premises wiring either Party may invoke the Dispute Resolution provisions of this Agreement or under resolved in Commission proceedings under section 252 of the Act.

9.4. Deployment of advanced services by KMC over subloops will be in accordance with the terms included in 6.7 and 6.8 of this section.

9.5. Reverse ADSL Loops. If a KMC's ADSL Transmission Unit (including those integrated into DSLAMs) is attached to Sprint's Network and if an ADSL Copper Loop should start at an outside location, and is looped through a host or remote, and then to the subscriber, the copper plant from the outside location to the Sprint host or remote central office must be a facility dedicated to ADSL transmission only and not part of Sprint's regular feeder or distribution plant.

10. LOCAL CIRUIT SWITCHING

10.1. Sprint shal provide KMC with nondiscriminatory access to Local Circuit Switching , including Tandem Switching, pursuant to Applicable Law. except to the extent the Commission or FCC determines that Local Circuit Switching is not required to be unbundled. Where Sprint is required to offer unbundled Local Circuit Switching Sprint will offer, in conjunction with Local Circuit Switching, Tandems Switching, Shared Transport, and access to signaling and call related databases as set forth in this Agreement.

10.2. Local Circuit Switching is the Network Element that provides the functionality required to connect the appropriate lines or trunks wired to the Main Distributing Frame (MDF) or Digital Cross Connect (DSX) panel to a desired line or trunk. Such functionality shall include all of the features, functions, and capabilities that the underlying Sprint switch providing such Local Circuit Switching function provides for Sprint's own services. Functionality may include, but is not limited to:

10.2.1. line signaling and signaling software;

10.2.2. digit reception;

10.2.3. dialed number translations;

10.2.4. call screening;

10.2.5. routing;

10.2.6. recording;

10.2.7. call supervision;

10.2.8. dial tone;

10.2.9. switching;

10.2.10. telephone number provisioning;

10.2.11. announcements;

10.2.12. calling features and capabilities (including call processing);

10.2.13. Centrex, or Centrex like services;

10.2.14. Automatic Call Distributor (ACD);

10.2.15. KMC presubscription (e.g., long distance Carrier, intraLATA toll), Carrier Identification Code (CIC) portability capabilities;

10.2.16. testing and other operational features inherent to the switch; and,

10.2.17. switch software.

10.3. Until the Commission or FCC establishes a maximum number of DS0 loops that a requesting Telecommunications Carrier can serve for each geographic market through unbundled switching, Sprint is not required to provide Local Circuit Switching under this Section 10 for switching used to serve end users with four or more lines in access density zone 1, in the top 50 Metropolitan Statistical Areas, or 24 or more lines to a single KMC end user location in all other areas. The Parties agree to abide by the cutoff established by the Commission or FCC and will agree to amend this Agreement and to establish an implementation plan, if the maximum is different than the limitation in this section and/or applied to additional geographic markets, within thirty (30) days of the Commission's or FCC's determination.

10.4. If the Commission or FCC determines that Sprint is not required to provide Local Circuit Switching for end-users served using DS0 capacity loops, the Parties agree to amend this Agreement to incorporate the transition plan established by the Commission. Notwithstanding the foregoing and where the appropriate transition plan has been established by the Commission, the Parties agree to negotiate and commit to an implementation plan to migrate its embedded unbundled local circuit switching customers within two months of the Commission's or FCC's determination. KMC may no longer obtain access to unbundled local circuit switching five (5) months after the Commission or FCC determination. KMC will submit orders to migrate its embedded base of end-user customers off of the unbundled circuit switching element in accordance with the following timetable measured from the date of the Commission or FCC determination:

10.4.1. KMC will submit orders for one-third (1/3) of all its unbundled local circuit switching end-user customers within thirteen (13) months of the date of the Commission or FCC determination.

10.4.2. KMC will submit orders for one-half (1/2) of its remaining unbundled local circuit switching end-user customers within twenty (20) months of the date of the Commission or FCC determination.

10.4.3. KMC will submit orders for its remaining unbundled local circuit switching end-user customers within twenty-seven (27) months of the date of the Commission or FCC determination.

10.5. Where the Commission determines that impairment would be cured by transitional access to Local Circuit Switching on an unbundled basis, Sprint will

provide Local Switching on an unbundled basis for the time period established by the Commission or FCC. KMC will submit an order for a Batch Hotcut to migrate each end-user off of unbundled Local Switching within the applicable time frame established by the Commission.

10.6. KMC will migrate end-users served using Local Circuit Switching at DS1 or above capacity loops to an alternative arrangement within one-hundred and eighty (180) days of October 2, 2003, within the transition period established by the Commission, unless the Commission files a petition with the FCC to rebut the national determination of no impairment. If the FCC denies the petition, KMC will migrate end-users served using Local Circuit Switching and DS1 or above capacity loops to an alternative arrangement within transition period specified by the FCC.

10.7. Sprint will provide customized routing at KMC's request where technically feasible. Customized routing enables the KMC to route their customer's traffic differently than normally provided by Sprint. For example, customized routing will allow the KMC to route their customer's operator handled traffic to a different provider. The rates for customized routing shall be as set forth in Table One.

10.8. Technical Requirements

10.8.1. Sprint shall provide its standard recorded announcements (as designated by KMC) and call progress tones to alert callers of call progress and disposition. KMC will use the ICB process for unique announcements.

10.8.2. Sprint shall change a subscriber from Sprint's Telecommunications Services to KMC's Telecommunications Services without loss of feature functionality unless expressly agreed otherwise by KMC.

10.8.3. Sprint shall control congestion points such as mass calling events, and network routing abnormalities, using capabilities such as Automatic Call Gapping, Automatic Congestion Control, and Network Routing Overflow. Application of such control shall be competitively neutral and not favor any user of unbundled switching or Sprint.

10.8.4. Sprint shall offer all Local Switching features that are technically feasible and provide feature offerings at Parity with those provided by Sprint to itself or any other party.

10.9. Interface Requirements. Sprint shall provide the following interfaces:

10.9.1. Standard Tip/Ring interface including loopstart or groundstart, on-hook signaling (e.g., for calling number, calling name and message waiting lamp);

10.9.2. Coin phone signaling;

10.9.3. Basic and Primary Rate Interface ISDN adhering to ANSI standards

Q.931, Q.932 and appropriate Telcordia Technical Requirements, except Sprint will not provide Primary Rate where the Commission determines, as provided in Section 8.6, that Local Circuit Switching to provide DS1 or above capacity loops is not required;

10.9.3.1 Integrated Services Digital Network (ISDN) is defined in two variations. The first variation is Basic Rate ISDN (BRI). BRI consists of 2 Bearer (B) Channels and one Data (D) Channel. The second variation is Primary Rate ISDN (PRI). PRI consists of 23 B Channels and one D Channel. Both BRI and PRI B Channels may be used for Circuit Switched Voice, Circuit Switched Data (CSD) or Packet Switched Data (PSD). The BRI D Channel may be used for call related signaling, non-call related signaling or packet switched data. The PRI D channel may be used for call related signaling.

10.9.4. Two-wire analog interface to PBX to include reverse battery, E&M, wink start and DID;

10.9.5. Four-wire analog interface to PBX to include reverse battery, E&M, wink start and DID; and

10.9.6. Four-wire DS1 interface to PBX or subscriber provided equipment (e.g., computers and voice response systems), except where the Commission determines, as provided in Section 8.6, that Local Circuit Switching to provide DS1 or above capacity loops is not required.

10.9.7 Switched Fractional DS1 with capabilities to configure Nx64 channels (where N = 1 to 24); and

10.9.8 DID Signaling.

10.10. Sprint shall provide the following interfaces, including but not limited to:

10.10.1. SS7 Signaling Network, Dial Pulse or Multi-Frequency trunking if requested by KMC;

10.10.2. Interface to KMC operator services systems or Operator Services through appropriate trunk interconnections for the system;

10.10.3. Interface to KMC directory assistance services through the KMC switched network or to Directory Services through the appropriate trunk interconnections for the system; and 950 access or other KMC required access to interexchange carriers as requested through appropriate trunk interfaces.

11. TANDEM SWITCHING

11.1. With the exception of access for Local Interconnection, Sprint will offer unbundled Tandem Switching in conjunction with unbundled Local Circuit Switching pursuant to Applicable Law. Where Sprint is no longer required to provide Tandem Switching the Parties agree to amend the Agreement and to establish an implementation time line in accordance with the transition period set forth by the Commission.

11.2. Tandem Switching is the function that establishes a communications path between two switching offices (connecting trunks to trunks) through a third switching office (the tandem switch). A host/remote end office configuration is not a Tandem Switching arrangement. Sprint will provide KMC access to the same shared transport facilities connected to the Tandem Switch that Sprint provides to its customers.

11.3. Technical Requirements

11.3.1. Tandem Switching shall preserve CLASS/LASS features and Caller ID as traffic is processed.

11.3.2. To the extent technically feasible, Tandem Switching shall record billable events for distribution to the billing center designated by KMC.

11.3.3. Tandem Switching shall control congestion using capabilities such as Automatic Congestion Control and Network Routing Overflow. Congestion control provided or imposed on KMC traffic shall be at Parity with controls being provided or imposed on Sprint traffic (e.g., Sprint shall not block KMC traffic and leave its traffic unaffected or less affected).

11.3.4. The Local Switching and Tandem Switching functions may be combined in an office. If this is done, both Local Switching and Tandem Switching shall provide all of the functionality required of each of those Network Elements in this Agreement.

11.3.5. Tandem Switching shall provide interconnection to the E911 PSAP where the underlying Tandem is acting as the E911 Tandem.

11.3.6. Use of Tandem Switching for Local Interconnection

11.3.6.1. Sprint tandem(s) will provide KMC Local Interconnection for local service purposes to the Sprint end offices and NXXs which subtend that tandem(s), where local trunking is provided, and access to the toll network;

11.3.6.2. Tandem Switching shall provide signaling to establish a tandem connection;

11.3.6.3. Tandem Switching shall provide recording of all billable events designated by KMC;

11.3.6.4. Tandem Switching shall provide screening and routing as designated by KMC;

11.3.6.5. Where available, Tandem Switching shall provide Advanced Intelligent Network ("AIN") triggers supporting AIN features;

11.3.6.6. Tandem Switching shall provide connectivity to Operator Systems as designated by KMC;

11.3.6.7. Tandem Switching shall provide access to toll free number portability database as designated by KMC;

11.3.6.8. Tandem Switching shall provide all trunk interconnections required for network interconnection with Sprint (*e.g.*, SS7, MF, DTMF, Dial Pulse, PRI-ISDN, DID, and CAMA-ANI (if appropriate for 911));

11.3.6.9. Interconnection to a Sprint tandem for transit purposes will provide access to telecommunications carriers which are connected to that tandem.

11.3.6.10. Where a Sprint Tandem Switch also provides End-Office Switch functions, interconnection to a Sprint tandem serving that exchange will also provide KMC access to Sprint's end offices.

11.3.6.11. Tandem Switching shall accept connections (including the necessary signaling and trunking interconnections) between end offices, other tandems, IECs, ICOs, CAPs and CLEC Switches.

11.3.6.12. Tandem Switching shall provide local tandeming functionality between two (2) end offices including two (2) offices belonging to different CLEC's (*e.g.*, between an KMC end office and the end office of another CLEC).

11.3.6.13. Tandem Switching shall preserve CLASS/LASS features and Caller ID as traffic is processed.

11.3.6.14. To the extent technically feasible, Tandem Switching shall record billable events for distribution to the billing center designated by CLEC. Billing requirements are specified in the Part I of this Agreement.

11.3.6.15. Sprint shall perform routine testing and fault isolation on the underlying Switch that is providing Tandem Switching and all its interconnections. When requested by KMC, the results and reports of the testing shall be made available to KMC in a timeframe agreed upon by the Parties.

11.3.6.16. When requested by KMC, Sprint shall provide Traffic and Performance data regarding traffic volume and characteristics or other measurable elements to KMC for review.

11.3.6.17. Tandem Switching shall control congestion using capabilities such as Automatic Congestion Control and Network Routing Overflow. Congestion control provided or imposed on KMC traffic shall be at Parity with controls being provided or imposed on Sprint traffic (e.g., Sprint shall not block KMC traffic and leave its traffic unaffected or less affected).

11.3.6.18. Tandem Switching shall route calls to Sprint or KMC endpoints or platforms (*e.g.*, Operator Services and PSAPs) on a per call basis as designated by KMC. Detailed primary and overflow routing plans for all interfaces available within the Sprint switching network shall be mutually agreed to by KMC and Sprint.

11.3.6.19. Tandem Switching shall process originating toll free traffic received from an KMC local Switch.

11.3.6.20. In support of AIN triggers and features, Tandem Switching shall provide SSP capabilities when these capabilities are not available from the Local Switching Network Element.

11.3.6.21. Tandem Switching shall provide interconnection to the E911 PSAP where the underlying Tandem is acting as the E911 Tandem.

11.3.6.22. Tandem Switching shall interconnect, with direct trunks, to all carriers with which Sprint interconnects.

11.3.6.23. Sprint shall provide all signaling necessary to provide Tandem Switching with no loss of feature functionality.

11.3.6.24. Tandem Switching shall interconnect with KMC's Switch, using two-way trunks, for traffic that is transiting via the Sprint network to InterLATA or IntraLATA carriers. At KMC's request, Tandem Switching shall record and keep records of traffic for billing. [

11.3.6.25. At KMC's request, Tandem Switching shall provide overflow routing of traffic from a given trunk group or groups onto another trunk group or groups according to the methodology that KMC designates.

12. SHARED TRANSPORT

12.1. Sprint will offer nondiscriminatory access to shared transport in conjunction with unbundled Local Switching pursuant to Applicable Law. Shared transport is defined as transmission facilities shared by more than one carrier, including Sprint, between end office switches, between end office switches and tandem switches, and between tandem switches in the Sprint network.

12.1.1. Sprint may provide Shared Transport over DS0, DS1, DS3, STS1 or higher transmission bit rate circuits, at Sprint's discretion.

12.1.2. Sprint shall be responsible for the engineering, provisioning, and maintenance of the underlying Sprint equipment and facilities that are used to provide Shared Transport.

13. DEDICATED TRANSPORT

13.1. Sprint will offer nondiscriminatory unbundled access to DS1 dedicated interoffice transmission facilities, or transport, pursuant to Applicable Law. Where the Commission or FCC makes a determination that requesting Telecommunications Carriers are not impaired without access to dedicated DS1 transport along a particular route, the Parties agree to amend this Agreement and to establish an implementation plan consistent with the transition plan set forth by the Commission. Dedicated transport is limited to the use of a single carrier and does not require switching at a tandem. Dedicated DS1 interoffice transmission facilities are defined as Sprint transmission facilities dedicated to a particular customer or carrier that provide Telecommunications Services between wire centers or switches owned by Sprint and that have a total digital signal speed of 1.544 megabytes per second. .

13.2. Sprint will offer nondiscriminatory unbundled access to DS3 dedicated interoffice transmission facilities, or transport, pursuant to Applicable Law. Where the Commission or FCC makes a determination that requesting telecommunications carriers are not impaired without access to dedicated DS3 transport along a particular route, the Parties agree to amend this Agreement and to establish an implementation plan consistent with the transition plan set forth by the

Commission. Dedicated transport is limited to the use of a single carrier and does not require switching at a tandem. Dedicated DS3 interoffice transmission facilities are defined as Sprint transmission facilities dedicated to a particular customer or carrier that provide Telecommunications Services between wire centers or switches owned by Sprint and that have a total digital signal speed of 44.736 megabytes per second. Not withstanding the foregoing, KMC may only obtain up to a maximum of twelve (12) unbundled dedicated DS3 circuits for any single route for which unbundled dedicated DS3 transport is available. If KMC has more than twelve (12) unbundled dedicated DS3 circuits for any single route, the Parties will establish an implementation plan consistent with the transition plan established by the Commission.

13.3. Sprint will provide nondiscriminatory access to Dark Fiber transport on an unbundled basis pursuant to this Agreement in accordance with Applicable Law. Where the Commission or FCC makes a finding that requesting Telecommunications Carriers are not impaired without access to unbundled Dark Fiber transport along a particular route, the Parties agree to amend this Agreement and to establish an implementation plan consistent with the transition plan set forth by the Commission. Dark fiber transport consists of unactivated optical interoffice transmission facilities.

13.3.1. Technical Requirements for DS1 and DS3 Dedicated Transport

13.3.1.1. Where technologically feasible and available, Sprint shall offer Dedicated Transport consistent with the underlying technology as follows:

13.3.1.1.1. When Sprint provides Dedicated Transport, the entire designated transmission circuit (e.g., DS-1, DS-3) shall be dedicated to KMC designated traffic.

13.3.1.1.2. Where Sprint has technology available, Sprint shall provide Dedicated Transport using currently available technologies including, but not limited to, DS1 and DS3 transport systems, SONET (or SDS) Bi-directional Line Switched Rings, SONET (or SDH) Unidirectional Path Switched Rings, and SONET (or SDS) point-to-point transport systems (including linear add-drop systems), at all available transmission bit rates.

13.3.1.1.3. When Dedicated Transport is provided as a circuit, it shall include appropriate:

13.3.1.1.3.1. Multiplexing functionality;

13.3.1.1.4. Access by or to third Parties;

13.3.1.1.5. Grooming functionality; and

13.3.1.1.6. Redundant equipment and facilities necessary to support protection and restoration.

13.3.1.2. When Dedicated Transport is provided for use for Local Interconnection it shall include:

13.3.1.2.1. Transmission equipment such as multiplexers, line terminating equipment, amplifiers, and regenerators;

13.3.1.2.2. Inter-office transmission facilities such as optical fiber, or copper twisted pair;

13.3.1.2.3. Redundant equipment and facilities necessary to support protection and restoration; and

13.3.1.2.4. Dedicated Transport includes the Digital Cross-Connect System ("DCS") functionality as an option. DCS is described below in subsection 10.5.

13.3.1.3. Where Sprint has technology available, Sprint shall offer Dedicated Transport using currently available technologies including, but not limited to, DS1 and DS3 transport systems, SONET (or SDS) Bi-directional Line Switched Rings, SONET (or SDH) Unidirectional Path Switched Rings, and SONET (or SDS) point-to-point transport systems (including linear add-drop systems), at all available transmission bit rates.

13.3.1.4. When requested by KMC, Dedicated Transport shall provide physical diversity. Physical diversity means that two (2) circuits are provisioned in such a way that no single failure of facilities or equipment will cause a failure on both circuits.

13.3.1.5. When physical diversity is requested by KMC, Sprint shall provide the maximum feasible physical separation between transmission paths for all facilities and equipment, unless otherwise agreed by KMC.

13.3.1.6. Upon KMC's request, where permitted by Sprint's current systems (as upgraded by Sprint from time to time) or subject to vendor development that will allow such functionality and that will include necessary security features, Sprint shall provide

Real Time and continuous remote access to performance monitoring and alarm data affecting, or potentially affecting, KMC's traffic on Dedicated Transport systems. Where System development is required, Sprint agrees to work with its vendors to facilitate development.

14. DIGITAL CROSS-CONNECT SYSTEM ("DCS")

14.1 Definition

14.1.1 DCS is a function which provides automated cross-connection of Digital Signal level 0 ("DS0") or higher transmission bit rate digital channels within physical interface facilities. Types of DCSs include, but are not limited to, DCS 1/0s, DCS 3/1s, and DCS 3/3s, where the nomenclature 1/0 denotes interfaces typically at the DS1 rate or greater with cross-connection typically at the DS0 rate. This same nomenclature, at the appropriate rate substitution, extends to the other types of DCSs specifically cited as 3/1 and 3/3. Types of DCSs that cross-connect Synchronous Transport Signal level 1 (STS-1s) or other Synchronous Optical Network ("SONET") signals (*e.g.*, STS-3) are also DCSs, although not denoted by this same type of nomenclature. DCS may provide the functionality of more than one of the aforementioned DCS types (*e.g.*, DCS 3/3/1 which combines functionality of DCS 3/3 and DCS 3/1). For such DCSs, the requirements will be, at least, the aggregation of requirements on the "component" DCSs.

14.2 In locations where automated cross-connection capability does not exist, DCS will be defined as the combination of the functionality provided by a Digital Signal Cross-Connect ("DSX") or Light Guide Cross-Connect ("LGX") patch panels and D4 channel banks or other DS0 and above multiplexing equipment used to provide the function of a manual cross-connection.

14.3 Interconnection between a DSX or LGX, to a Switch, another cross-connect, or other service platform device within the premises where the DSX or LGX is located, is included as part of DCS.

14.4 DCS Technical Requirements

14.4.1 DCS shall provide completed end-to-end cross-connection of the channels designated by KMC.

14.4.2 DCS shall perform facility grooming, multipoint bridging, one-way broadcast, two-way broadcast, and facility test functions.

14.4.3 DCS shall provide multiplexing, format conversion, signaling conversion, or other functions.

14.4.4 The end-to-end cross-connection assignment shall be input to the underlying device used to provide DCS from an operator at a terminal or

via an intermediate system. The cross-connection assignment shall remain in effect whether or not the circuit is in use.

14.4.5 KMC will negotiate with Sprint relating to the administration and maintenance of DCS, including updates to the control software to current available releases.

14.4.6 Sprint shall provide various types of Digital Cross-Connect Systems including:

14.4.6.1 DS0 cross-connects (typically termed DCS 1/0);

14.4.6.2 DS1/VT1.5 (Virtual Tributaries at the 1.5/Mbps rate) cross-connects (typically termed DCS 3/1);

14.4.6.3 DS3 cross-connects (typically termed DCS 3/3);

14.4.6.4 STS-1 cross-connects; and

14.4.6.5 Other Technically Feasible cross-connects designated by KMC.

14.4.6.6 Sprint shall provide immediate and continuous configuration and reconfiguration of the channels between the physical interfaces (*i.e.*, Sprint shall establish the process to implement cross-connects on demand, or, at KMC's option, permit KMC control of such configurations and reconfigurations), where permitted by Sprint's current systems (as upgraded by Sprint from time to time) or subject to vendor development that will allow such functionality and that will include necessary security features. Where system development is required, Sprint agrees to work with its vendors to facilitate development.

14.4.6.7 DCS shall continuously monitor protected circuit packs and redundant common equipment.

14.4.6.8 DCS shall automatically Switch to a protection circuit pack on detection of a failure or degradation of normal operation.

14.4.6.9 The underlying equipment used to provide DCS shall be equipped with a redundant power supply or a battery back-up.

14.4.6.10 Sprint shall have available spare facilities and equipment necessary for provisioning repairs in order to meet KMC's maintenance standards as specified in the Provisioning and Maintenance Sections.

14.4.6.11 At KMC's option, where permitted by Sprint's current systems (as upgraded by Sprint from time to time) or subject to vendor development that will allow such functionality and that will include necessary security features, Sprint shall provide KMC with

Real Time Performance monitoring and alarm data on the signals and the components of the underlying equipment used to provide DCS that actually impact or might impact KMC's services. For example, this may include hardware alarm data and facility alarm data on a DS3 in which an KMC DS1 is traversing. Where system development is required, Sprint agrees to work with its vendors to facilitate development.

14.4.6.12 At KMC's option, where permitted by Sprint's current systems (as upgraded by Sprint from time to time) or subject to vendor development that will allow such functionality and that will include necessary security features, Sprint shall provide KMC with Real Time ability to initiate tests on integrated equipment used to test the signals and the underlying equipment used to provide DCS, as well as other integrated functionality for routine testing and fault isolation. Where system development is required, Sprint agrees to work with its vendors to facilitate development.

14.4.6.13 Where permitted by Sprint's current systems (as upgraded by Sprint from time to time), DCS shall provide SONET to asynchronous Gateway functionality (*e.g.*, STS-1 to DS1 or STS-1 to DS3). Where system development is required, Sprint agrees to work with its vendors to facilitate development.

14.4.6.14 DCS shall perform optical to electrical conversion where the underlying equipment used to provide DCS contains optical interfaces or terminations (*e.g.*, Optical Carrier level 3, *i.e.*, OC-3, interfaces on a DCS 3/1).

14.4.6.15 Where permitted by Sprint's current systems (as upgraded by Sprint from time to time), DCS shall have SONET ring terminal functionality where the underlying equipment used to provide DCS acts as a terminal on a SONET ring. Where system development is required, Sprint agrees to work with its vendors to facilitate development.

14.4.6.16 Where permitted by Sprint's current systems (as upgraded by Sprint from time to time), DCS shall provide multipoint bridging of multiple channels to other DCSs. KMC may designate multipoint bridging to be one-way broadcast from a single master to multiple tributaries, or two-way broadcast between a single master and multiple tributaries. Where system development is required, Sprint agrees to work with its vendors to facilitate development.

14.4.6.17 Where permitted by Sprint's current systems (as upgraded by Sprint from time to time), DCS shall multiplex lower speed channels onto a higher speed interface and demultiplex higher speed channels onto lower speed interfaces as designated by KMC.

Where system development is required, Sprint agrees to work with its vendors to facilitate development.

14.4.6.18 DCS Interface Requirements

14.4.6.18.1 Where permitted by Sprint's current systems (as upgraded by Sprint from time to time), Sprint shall provide physical interfaces on DS0, DS1, and VT1.5 channel cross-connect devices at the DS1 rate or higher. In all such cases, these interfaces shall be in compliance with applicable Telcordia (formerly Bellcore) and ANSI standards.

14.4.6.18.2 Where permitted by Sprint's current systems (as upgraded by Sprint from time to time), Sprint shall provide physical interfaces on DS3 channel cross-connect devices at the DS3 rate or higher. In all such cases, these interfaces shall be in compliance with applicable Telcordia (formerly Bellcore) and ANSI standards.

14.4.6.18.3 Where permitted by Sprint's current systems (as upgraded by Sprint from time to time), Sprint shall provide physical interfaces on STS-1 cross-connect devices at the OC-3 rate or higher. In all such cases, these interfaces shall be in compliance with applicable Telcordia (formerly Bellcore) and ANSI standards.

14.4.6.18.4 Where permitted by Sprint's current systems (as upgraded by Sprint from time to time), Interfaces on all other cross-connect devices shall be in compliance with applicable Telcordia (formerly Bellcore) and ANSI standards.

14.4.6.18.5 DCS shall, at a minimum, where permitted by Sprint's current systems (as upgraded by Sprint from time to time) meet all of the requirements set forth in applicable ANSI, Telcordia and other industry standards.

15. SIGNALING SYSTEMS

15.1. Sprint will offer unbundled access to Sprint's signaling network in conjunction with unbundled Circuit Switching where KMC purchases unbundled Local Circuit Switching for a particular end user, to the extent that Local Circuit Switching is required to be unbundled by the Commission or FCC.

15.2. Sprint will offer signaling using the same signaling transfer points (STPs) and signaling links which Sprint uses to provide signaling to its own end users.

15.3. Terms and conditions for allowing the KMC to connect its switch with Sprint's signaling system are included in Section 20 of this Agreement.

16. CALL-RELATED DATABASES WITH UNE SWITCHING

16.1. Sprint will include unbundled access to call-related databases, including, but not limited to, the Line Information database (LIDB), Toll Free Calling database, Number Portability database, Calling Name (CNAM) database, Advanced Intelligent Network (AIN) databases, Signalling Control Point ("SCP") and the AIN platform and architecture in the same manner, and via the same signaling links, as Sprint, where KMC purchases unbundled Local Circuit Switching for a particular end user, to the extent that that Local Circuit Switching is required to be unbundled by the Commission or FCC. Sprint reserves the right to decline to offer unbundled access to certain AIN software that qualifies for proprietary treatment.

16.2. The terms and conditions for allowing KMC to connect its switch or signaling system to Sprint's call-related databases are included in Section 20 of this Agreement.

16.3. Sprint will provide unbundled access to call-related databases, including, but not limited to, the Line Information database (LIDB), Toll Free Calling database, Number Portability database, Calling Name (CNAM) database, Advanced Intelligent Network (AIN) databases, Automatic Location Identification/Data Management System (ALI/DMS), and the AIN platform and architecture in the same manner, and via the same signaling links, as Sprint, where KMC purchases unbundled Local Circuit Switching for a particular end user at no additional charge.

16.4. Line Information Database (LIDB)

16.4.1. The LIDB is a transaction-oriented database that contains records associated with subscribers' Line Numbers and Special Billing Numbers. LIDB accepts queries in conjunction with unbundled local switching and provides appropriate responses. The query originator need not be the owner of LIDB data. LIDB queries include functions such as screening billed numbers to determine if the end user associated with the number has requested deny Collect or deny Third Number Billing call restrictions or whether a telephone line number based non-proprietary calling card has a valid Personal Identification Number (PIN).

16.4.1.1. Sprint shall process KMC's subscribers' records in LIDB at Parity with Sprint subscriber records.

16.4.1.2. Sprint shall perform backup and recovery of all of KMC's data in LIDB at Parity with backup and recovery of all other records in the LIDB, including sending to LIDB all changes made since the date of the most recent backup copy.

16.4.1.3. Sprint will provide storage of KMC end user's numbers in the Line Information database (LIDB), where KMC purchases unbundled local circuit switching for a particular end user, at no additional charge.

16.5. Calling Name Database (CNAM).

16.5.1. The CNAM database is a transaction-oriented database accessible via the CCS network. It contains name records associated with subscribers' Line Numbers and Names. CNAM accepts queries from other Network Elements and provides the calling name. The query originator need not be the owner of CNAM data. CNAM provides the calling parties' name to be delivered and displayed to the terminating caller with Caller ID with Name.

16.5.2. Sprint will store KMC Caller Names in the Sprint CNAM Database at parity with how Sprint stores its own end users information. Sprint shall provide access to Sprint CNAM database for purpose of receiving and responding to CNAM Service Queries in the same manner, and via the same signaling links, as Sprint where KMC purchases unbundled local circuit switching, to the extent that that local circuit switching is required to be unbundled by the Commission or FCC.

16.5.3. Sprint will provide storage of KMC end user's numbers in the CNAM Database and access to Sprint CNAM database for purpose of receiving and responding to CNAM Service Queries, where KMC purchases unbundled local circuit switching for a particular end user, at no additional charge.

16.6. Toll Free Number Database

16.6.1. The Toll Free Number Database provides functionality necessary for toll free (e.g., 800 and 888) number services by providing routing information and additional vertical features (i.e., time of day routing by location, by carrier and routing to multiple geographic locations) during call setup in response to queries from STPs. The Toll Free records stored in Sprint's database are downloaded from the SMS/800. Sprint shall provide the Toll Free Number Database in accordance with the following:

16.6.1.1. Sprint shall make the Sprint Toll Free Number Database available for KMC to query in the same manner, and via the same signaling links, as Sprint where KMC purchases unbundled local circuit switching, to the extent that that local circuit switching is required to be unbundled by the Commission or FCC.

16.6.1.2. The Toll Free Number Database shall return KMC identification and, where applicable, the queried toll free number, translated numbers and instructions as it would in response to a query from a Sprint switch.

16.6.1.3. Sprint will provide access to its Toll Free Number Database for purpose of receiving and responding to queries, where KMC purchases unbundled local circuit switching for a particular end user, at no additional charge.

16.7. Local Number Portability Local Routing Query Service

16.7.1. TCAP messages originated by KMC's SSPs and received by Sprint's database will be provided a response upon completion of a database lookup to determine the LRN. Sprint will not bill KMC for the provision of these messages.

16.7.2. Sprint will provide the LNP Query Service in the same manner, and via the same signaling links, as Sprint where KMC purchases unbundled local circuit switching, to the extent that that local circuit switching is required to be unbundled by the Commission or FCC.

16.7.3. Sprint will provide access to the LNP Query Service for purpose of receiving and responding to queries, where KMC purchases unbundled local circuit switching for a particular end user, at no additional charge.

17. CALL-RELATED DATABASES WITH OUT UNE SWITCHING

17.1. Sprint will include access to call-related databases, including, but not limited to, the Line Information database (LIDB), Toll Free Calling database, Number Portability database, Calling Name (CNAM) database, Advanced Intelligent Network (AIN) databases, Signalling Control Point ("SCP"), and the AIN platform and architecture in the same manner, and via the same signaling links, as Sprint, at the rates agreed upon by the Parties and set forth in Table One.

17.2. Sprint will provide unbundled access to call-related databases, including, but not limited to, the Line Information database (LIDB), Toll Free Calling database, Number Portability database, Calling Name (CNAM) database, Advanced Intelligent Network (AIN) databases, Automatic Location Identification/Data Management System (ALI/DMS), and the AIN platform and architecture in the same manner, and via the same signaling links, as Sprint.

17.3. Line Information Database (LIDB)

17.3.1. The LIDB is a transaction-oriented database that contains records associated with subscribers' Line Numbers and Special Billing Numbers. LIDB accepts and provides appropriate responses. The query originator need not be the owner of LIDB data. LIDB queries include functions such as screening billed numbers to determine if the end user associated with the number has requested deny Collect or deny Third Number Billing call restrictions or whether a telephone line number based non-proprietary calling card has a valid Personal Identification Number (PIN).

17.3.1.1. Sprint shall process KMC's subscribers' records in LIDB at Parity with Sprint subscriber records.

17.3.1.2. Sprint shall perform backup and recovery of all of KMC's data in LIDB at Parity with backup and recovery of all other records in the LIDB, including sending to LIDB all changes made since the date of the most recent backup copy.

17.3.1.3. Sprint will provide storage of KMC end user's numbers in the Line Information database (LIDB) at no additional charge.

17.4. Calling Name Database (CNAM).

17.4.1. The CNAM database is a transaction-oriented database accessible via the CCS network. It contains name records associated with subscribers' Line Numbers and Names. CNAM accepts queries from other Network Elements and provides the calling name. The query originator need not be the owner of CNAM data. CNAM provides the calling parties' name to be delivered and displayed to the terminating caller with Caller ID with Name.

17.4.2. Sprint will store KMC Caller Names in the Sprint CNAM Database at parity with how Sprint stores its own end users information. Sprint shall provide access to Sprint CNAM database for purpose of receiving and responding to CNAM Service Queries in the same manner, and via the same signaling links, as Sprint.

17.4.3. Sprint will provide storage of KMC end user's numbers in the CNAM Database and access to Sprint CNAM database for purpose of receiving and responding to CNAM Service Queries.

17.5. Toll Free Number Database

17.5.1. The Toll Free Number Database provides functionality necessary for toll free (e.g., 800 and 888) number services by providing routing information and additional vertical features (i.e., time of day routing by location, by carrier and routing to multiple geographic locations) during call setup in response to queries from STPs. The Toll Free records

stored in Sprint's database are downloaded from the SMS/800. Sprint shall provide the Toll Free Number Database in accordance with the following:

17.5.1.1. Sprint shall make the Sprint Toll Free Number Database available for KMC to query in the same manner, and via the same signaling links, as Sprint.

17.5.1.2. The Toll Free Number Database shall return KMC identification and, where applicable, the queried toll free number, translated numbers and instructions as it would in response to a query from a Sprint switch.

17.5.1.3. Sprint will provide access to its Toll Free Number Database for purpose of receiving and responding to queries.

17.6. Local Number Portability Local Routing Query Service

17.6.1. TCAP messages originated by KMC's SSPs and received by Sprint's database will be provided a response upon completion of a database lookup to determine the LRN. Sprint will not bill KMC for the provision of these messages.

17.6.2. Sprint will provide the LNP Query Service in the same manner, and via the same signaling links, as Sprint where KMC purchases unbundled local circuit switching, to the extent that that local circuit switching is required to be unbundled by the Commission or FCC.

17.6.3. Sprint will provide access to the LNP Query Service for purpose of receiving and responding to queries, where KMC purchases unbundled local circuit switching for a particular end user, at no additional charge.

18. OPERATIONS SUPPORT SYSTEMS (OSS)

18.1. Sprint will offer unbundled access to Sprint's operations support systems to the extent technically feasible in a non-discriminatory manner at Parity. OSS consists of pre-ordering, ordering, provisioning, maintenance and repair, and billing functions supported by Sprint's databases and information. The OSS element includes access to all loop qualification information contained in Sprint's databases or other records, including information on whether a particular loop is capable of providing advanced services.

18.2. Systems and Process Testing. Sprint shall cooperate with KMC upon KMC's request to use a system, to ensure that all operational interfaces and processes are in place and functioning properly. The Parties shall develop mutually testing

procedures that simulate actual operational procedures and systems interfaces to the greatest extent possible.

19. LOOP MAKE-UP INFORMATION

19.1. Sprint shall make available Loop Make-Up Information in a non-discriminatory manner at Parity with the data and access it gives itself and other KMCs, including affiliates. The charges for Loop Make-Up Information are set forth in Table One to this Agreement.

19.2. If KMC requests Loop Make-Up, information provided to the KMC will not be filtered or digested in a manner that would affect the KMC's ability to qualify the loop for advanced services.

19.3. Sprint shall provide Loop Make-Up Information based on the individual telephone number or address of an end-user in a particular wire center or NXX code. Loop Make-Up Information requests will be rejected if the service address is not found within existing serving address information, if the telephone number provided is not a working number or if the POI identified is not a POI where the requesting KMC connects to the Sprint LTD network.

19.4. Errors identified in validation of the Loop Make-Up Information inquiry order will be returned to the KMC.

19.5. Sprint may provide the requested Loop Make-Up Information to the KMCs in whatever manner Sprint would provide to their own internal personnel, without jeopardizing the integrity of proprietary information (i.e. - fax, intranet inquiry, document delivery, etc.). If the data is provided via fax, KMC must provide a unique fax number used solely for the receipt of Loop Make-Up Information.

20. DARK FIBER

20.1. General Rules and Definition

20.1.1. Dark Fiber is an optical transmission facility without attached multiplexing, aggregation or other electronics. Dark Fiber is unactivated fiber optic cable, deployed by Sprint, that has not been activated through connections to optronics that light it, and thereby render it capable of carrying communications.

20.1.2. Sprint will unbundle Dark Fiber for the Dedicated Transport, Loop and Sub-loop network elements in accordance with the FCC's Triennial Review Order (CC Docket No. 96-98) and as set forth in this Agreement, except where the Commission or FCC has determined that a requesting Telecommunications Carrier is not impaired without such access. Dark fiber is not a separate network element, but a subset of Dedicated Transport and Loop network elements. In addition to the

terms in this section, any rules, guidelines and Agreement provisions for these network elements, including accessibility, will apply to Dark Fiber.

20.2. Fiber Availability

20.2.1. Spare fibers in a sheath are not considered available if Sprint has plans to put the fiber in use within the current year or the following year.

20.2.2. Sprint will also maintain fibers to facilitate maintenance, rearrangements and changes. Sprint will generally reserve 8% of fibers in a sheath for maintenance, subject to a minimum of four (4) fibers and a maximum of twelve (12) fibers.

20.2.3. Dark fiber requests will be handled on a first come, first served basis, based on the date the Dark Fiber Application (DFA) is received.

20.3. Interconnection Arrangements

20.3.1. Rules for gaining access to unbundled network elements apply to Dark Fiber. Virtual and physical collocation arrangements may be used by KMC to locate the optical electronic equipment necessary to "light" leased Dark Fiber.

20.3.2. The KMC that requests Dark Fiber must be able to connect to the Sprint fiber by means of fiber patch panel.

20.3.3. If fiber patch panels (FPPs) are not located within close enough proximity for a fiber patch cord, Sprint will purchase and install intraoffice cabling at the KMC's expense. This process is outside the scope of this agreement.

20.3.4. Establishment of applicable fiber optic transmission equipment or intermediate repeaters needed to power the unbundled Dark Fiber in order to carry Telecommunications Services is the responsibility of the KMC.

20.4. Dark Fiber Application and Ordering Procedure

20.4.1. KMC will submit a Dark Fiber Application (DFA) and application fee to request that Sprint determine the availability of Dark Fiber between the KMC-specified locations. See Table One for application fee amount.

20.4.2. Within twenty (20) business days of receipt of DFA, Sprint will provide KMC with a response regarding fiber availability and price.

20.4.2.1. If Dark Fiber is not available, Sprint will notify KMC of the DFA rejection.

20.4.2.2. KMC will follow the Dispute Resolution Process outlined in Part B of this Agreement if KMC wishes to contest the rejection.

20.4.3. If Dark Fiber is available, KMC will notify Sprint of acceptance/rejection of Dark Fiber quote, via a firm order, within ten (10) business days of receipt of quote. Sprint will reserve the requested Dark Fiber for the KMC during these ten (10) business days. If, however, KMC does not submit a firm order by the tenth (10th) business day, the fiber will no longer be reserved.

20.4.4. After ten (10) business days of receipt of the price quote, if KMC has not accepted, KMC must submit another DFA and application fee.

20.4.5. The KMC will submit a firm order for Dark Fiber via the local service request (LSR) or access service request (ASR), as appropriate.

20.4.6. By submitting the Dark Fiber firm order, the KMC agrees to pay quoted monthly recurring and non-recurring charges. See Table One for monthly recurring and non-recurring charges.

20.4.7. Due Date. Sprint will provision Dark Fiber twenty (20) Business Days after it receives firm order from KMC. Billing of the monthly recurring and non-recurring charges will begin upon completion of Dark Fiber order. Sprint will allow KMC to extend due date for firm order completion up to sixty (60) business days from the date Sprint receives firm order from KMC. This extended due date must be specified on the firm order.

20.4.7.1. Billing of the monthly recurring and non-recurring charges will begin on the due date of the Dark Fiber order completion unless:

20.4:7.1.1. KMC cancels firm order before the established due date. If this occurs, KMC agrees to reimburse Sprint for all costs incurred to date; or

20.4.7.1.2. a third party submits firm order for same Dark Fiber. If this occurs, KMC must begin

compensating Sprint for monthly recurring and non-recurring charges in order to reserve fiber, once Sprint is able to provide Dark Fiber to KMC.

20.5. Maintenance and Testing

20.5.1. Sprint is only responsible for maintaining the facilities that it owns.

20.5.2. Sprint will conduct an end-to-end test of Dark Fiber after receipt of the firm order.

20.5.3. For meet point arrangements, Sprint will conduct cooperative testing with another carrier at KMC's request. Additional rates and charges will apply.

20.5.4. Sprint does not guarantee that the transmission characteristics of the Dark Fiber will remain unchanged over time.

20.5.5. Sprint is not responsible for determining whether the transmission characteristics of the Dark Fiber will accommodate the KMC requirements.

20.6. Rules for Take Back

20.6.1. Sprint reserves the right to take back Dark Fiber to meet its carrier of last resort obligations.

20.6.2. Sprint will provide KMC twelve (12) months written notice prior to taking back fiber. The Parties will negotiate and mutually agree to an acceptable transition period.

20.6.3. If multiple KMCs have leased fiber within a single sheath, Sprint will take back the fiber that was the last to be leased.

20.6.4. Sprint will provide the KMC with alternative transport arrangements when Sprint takes back working fiber.

20.6.5. The Dispute Resolution Procedures found in Part B of this Agreement will be followed if KMC wishes to contest Sprint's decision to take back its leased fiber.

21. VOICE UNE-P AND EEL

21.1. Combination of Network Elements

21.1.1. KMC may order Unbundled Network Elements either individually or in the combinations, including UNE-P and EEL pursuant to Applicable Law and this Agreement.

21.1.2. For the purpose of this section, wholesale services includes both services KMC procures for resale pursuant to 251(c)(4) and exchange access service purchased from Sprint's access tariffs.

21.2. General Terms and Conditions

21.2.1. Sprint will allow KMC to order each Unbundled Network Element individually in order to permit KMC to combine such Network Elements with other Network Elements obtained from Sprint as provided for herein, or with network components provided by itself or by third parties to provide Telecommunications Services to its end users, provided that such combination is technically feasible and would not impair the ability of other carriers to obtain access to other unbundled network elements or to interconnect with Sprint's network or in combination with any other Network Elements that are currently combined in Sprint's Network. Upon request, Sprint will perform the functions necessary to combine UNEs, even if those elements are not ordinarily combined in Sprint's network, provided that such combination is technically feasible and would not impair the ability of other carriers to obtain access to other unbundled network elements or to interconnect with Sprint's network.

21.2.2. KMC may Commingle an unbundled network element or combination of UNEs with wholesale services purchased from Sprint or services purchased from a third party provider. Upon request, Sprint will perform the work necessary to Commingle such UNE or UNE combinations with wholesale services purchased from Sprint. Each component of the commingled facility, either UNE or wholesale service, will be billed at the UNE or wholesale service rate for that component, plus applicable non-recurring charges. When a cross connect is ordered in combination with a UNE loop or Local Interconnection, the cross connect shall be billed at the appropriate UNE rate for such service. Sprint will not ratchet price individual components; that is, Sprint will not reflect a combination of UNE and wholesale rates for the same component. Wholesale service rates will be per the appropriate tariff, including any applicable resale discounts pursuant to this Agreement. Sprint will provide KMC access to UNE-P and EEL pursuant to Applicable Law. KMC is not required to own or control any of its own local exchange facilities before it can purchase or use UNE-P or EEL to provide a telecommunications service under this Agreement. Any request by KMC for Sprint to provide combined UNEs that are not otherwise specifically provided for under this Agreement will be made in accordance with the BFR process described in Section 4 and made available to KMC upon implementation by Sprint of the necessary operational modifications.

21.2.3. If Sprint denies KMC's request to combine any unbundled network elements Sprint must demonstrate to the Commission that the requested combination would undermine the ability of other carriers to obtain

access to unbundled network elements or to interconnect with the incumbent LEC's network.

21.3. Specific Combinations and Pricing

21.3.1. In order to facilitate the provisioning of UNE-P and EELs Sprint shall support the ordering and provisioning of these specific combinations as set forth below.

21.3.2. Upon request, Sprint shall convert a wholesale service, or group of wholesale services, to the equivalent unbundled network element, or combination of unbundled network elements, that is available to the requesting telecommunications carrier under section 251(c)(3) of the Act and the Triennial Review.

21.3.3. Sprint shall perform any conversion from a wholesale service or group of wholesale services to an unbundled network element or combination of unbundled network elements without adversely affecting the service quality perceived by the requesting telecommunications KMC's end-user customer.

21.3.4. Except as agreed to by the parties, Sprint shall not impose any untariffed termination charges, or any disconnect fees, re-connect fees, or charges associated with establishing a service for the first time, in connection with any conversion between a wholesale service or group of wholesale services and an unbundled network element or combination of unbundled network elements.

21.3.5. Sprint shall provide access to unbundled network elements and combinations of unbundled network elements without regard to whether KMC seeks access to the elements to establish a new circuit or to convert an existing circuit from a service to unbundled network elements.

21.4. Sprint Offers the Following Combinations of Network Elements

21.4.1. Unbundled Network Element Platform (UNE-P). UNE-P is the combination of the NID, Loop, Local Circuit Switching, Shared Transport, and Local Tandem Switching network elements.

21.4.1.1. Sprint will offer the combination of the NID, Loop, Local Circuit Switching, Local Switch Port, Shared Transport, and Local Tandem Switching (where Sprint is the provider of Shared Transport and Local Tandem Switching) unbundled network elements to provide VOICE UNE-P, where Sprint is required to provide unbundled local switching, at the applicable recurring charges and non-recurring charges as specified in Table One for UNE-P plus the applicable Service

Order Charge. Sprint will also bill KMC for applicable Usage Data Recording and Transmission Charges as indicated in Table One.

21.4.1.2. Sprint shall bill the recurring charges for usage based UNE-P elements (Local Circuit Switching, Shared Transport, Local Tandem Switching) to KMC at the recurring flat rate charge reflected in Table One.

21.4.1.3. When KMC utilizes UNE-P, reciprocal compensation for UNE-P Local Traffic originated by or terminated to a KMC UNE-P customer and ISP-Bound Traffic that originates from and terminates to a KMC UNE-P or Sprint customer within the same switch shall be on a bill and keep basis.

21.4.1.4. Sprint will provide originating and terminating access records to KMC for access usage over UNE-P. KMC will be responsible for billing the respective originating and/or terminating access charges directly to the IXC.

21.4.1.5. Sprint will provide KMC toll call records that will allow it to bill its end users for toll charges. Such record exchange will be in industry standard EMI format as the charges set forth in Table One. Any non-standard requested format would be handled through the BFR process as set forth in Section 4 of this Agreement.

21.4.2. EEL is the combination of the NID, Loop, and Dedicated Transport network elements.

21.4.2.1. Sprint will offer the combination of unbundled Local Loops with unbundled dedicated transport pursuant to Applicable Law to provide EELs at the combination of the applicable recurring and non-recurring charges as specified in Table One for Loops, Dedicated Transport, and where applicable, Multiplexing. The applicable recurring and nonrecurring charges, including but not limited to UNE cross connect charges and Service Order Charges. Sprint will cross-connect unbundled 2 or 4-wire analog or 2-wire digital Loops to unbundled voice grade/DS0, DS1, or DS3 Dedicated Transport facilities (DS0 dedicated transport is only available between Sprint central offices) for KMC's provision of circuit switched telephone exchange service to KMC's end users.

21.4.2.2. Multiplexing shall be provided as necessary as part of Dedicated Transport.

21.4.2.3. In order to obtain the following EELS, a requesting KMC may self-certify that it satisfies the following service eligibility criteria for each circuit. KMC must continue to be in compliance with the service eligibility criteria for as long as KMC continues to receive the services in this section.

21.4.2.4. EEL Combinations

21.4.2.4.1. Unbundled DS1 Loop in combination with UNE DS1 Dedicated Transport.

21.4.2.4.2. Unbundled DS1 Loop commingled with dedicated DS1 transport wholesale service (either special access or resale) or third party service.

21.4.2.4.3. Unbundled DS1 Loop in combination with UNE DS3 Dedicated Transport.

21.4.2.4.4. Unbundled DS1 Loop commingled with dedicated DS3 transport wholesale service (either special access or resale) or third party service.

21.4.2.4.5. Unbundled DS3 Loop in combination with UNE DS3 Dedicated Transport.

21.4.2.4.6. Unbundled DS3 Loop commingled with dedicated DS3 transport wholesale service (either special access or resale) or third party service.

21.4.2.4.7. Unbundled DS1 Dedicated Transport commingled with DS1 channel termination.

21.4.2.4.8. Unbundled DS3 Dedicated Transport commingled with DS1 channel termination service or third party service.

21.4.2.4.9. Unbundled DS3 Dedicated Transport commingled with DS3 channel termination service or third party service.

21.4.2.5. EEL Eligibility Criteria

21.4.2.5.1. KMC must have a state certification to provide local voice service or, in the absence of a state certification requirement, has complied with registration, tariffing, filing fee, or other regulatory requirements applicable to the provision of local voice service in that area;

21.4.2.5.2. Each DS1 circuit, each DS1 EEL, and each DS1-equivalent circuit on a DS3 EEL:

21.4.2.5.3. Each DS-1 circuit to be provided to each KMC customer must be assigned one local number prior to the provision of service over the circuit;

21.4.2.5.4. Each DS1-equivalent circuit on a DS3 EEL must have its own local number assignment, so that each DS3 has at least 28 local voice numbers assigned to it;

21.4.2.5.5. Each circuit to be provided to each customer must provide 911 or E911 capability prior to the provision of service over the circuit;

21.4.2.5.6. Each circuit to be provided to each customer must terminate into a collocation governed by 251(c)(6) of the Act and at a Sprint central office within the same LATA as the KMC's customer's premises. When Sprint is not the collocator the collocation must be located at a third party's premises within the same LATA as the customer's premises, when Sprint is the collo ator;

21.4.2.5.7. For each 24 DS1 EELs or other facilities having equivalent capacity, KMC must maintain at least one active DS1 local service interconnection trunk and KMC is required to transmit the calling party's number in connection with calls exchanged over each trunk. An interconnection trunk meets the requirements of this paragraph if the requesting telecommunications carrier will transmit the

calling party's number in connection with calls exchanged over the trunk; and

21.4.2.5.8. Each circuit to be provided to each customer will be served by a switch capable of switching local voice traffic.

21.4.2.6. Should reasonable cause arise, Sprint reserves the right, upon sixty (60) Days notice, to request an audit of KMC's compliance with the service eligibility criteria defined by the FCC and as set forth above. The Parties will mutually agree to the timing and scope of the audit prior to commencing. Sprint will hire and pay for an independent auditor to perform the audit. KMC will reimburse Sprint if the audit report concludes that KMC failed to materially comply with the service eligibility criteria set forth under Applicable Law. Sprint may request one audit in a calendar year. In the instance of non-compliance, KMC shall true-up any difference in payments, convert the non-compliant circuit to the appropriate service and make accurate payments going forward.

22. LINE SPLITTING

22.1. Line Splitting

22.1.1. Regardless of whether KMC provides its own switching or obtains local circuit switching as an unbundled network element, when KMC obtains an unbundled copper loop from Sprint, Sprint shall provide KMC with the ability to engage in line splitting arrangements with another CLEC using a splitter collocated at the central office where the loop terminates into a distribution frame or its equivalent.

22.1.2. Line Splitting is an arrangement between two carriers where one carrier provides the voice services and another carrier provides advanced services over an unbundled loop.

22.2. Unbundled loops purchased as part of UNE-P may be used in a Line Splitting arrangement. In this configuration, KMC leases the entire UNE Loop from Sprint, and Sprint performs operational activities necessary to allow the KMC to extract the high frequency loop spectrum so that KMC or another carrier can utilize the high frequency portion of the leased loop.

22.3. Whenever KMC purchases the unbundled loop either as part of UNE-P or otherwise, KMC shall control the entire loop spectrum. Because KMC or a third

party purchases the entire unbundled loop or combination, there are no other monthly recurring charges associated with Line Splitting arrangements.

22.4. Within ninety days (90) days of the Effective Date of this Agreement, Sprint shall institute procedures to allow KMC or another carrier to order HFS data capabilities on a UNE loop. Sprint must make all necessary network modifications, including providing nondiscriminatory access to operations support systems necessary for pre-ordering, ordering, provisioning, maintenance and repair, and billing for loops used in line splitting arrangements.

22.5. When either KMC or the other carrier orders Line Splitting using KMC's OCN, KMC will be billed the non-recurring charges for the Line Splitting service as set forth in Table One. When the other carrier orders Line Splitting using its own OCN, Sprint will bill the other carrier for the Line Splitting charges.

23. PENDING OR NO FACILITIES.

23.1. Consistent with the FCC's Order in Docket No. CC 01-228, *In the Matter of the Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers* ("Triennial Review Order"), Sprint may designate an order as "Pending" or "No Facilities" when KMC's order requires the construction of a new local loop from scratch by trenching or pulling cable. Sprint shall provide notification of Pending or No Facilities orders, within two (2) business days of order receipt and shall specify whether the orders are rejected due to 'pending' facilities, 'no' facilities or additional construction required. Sprint shall include verification that all equipment and facility options have been reviewed for availability to provision the requested service, including without limitation, spare or retired copper facilities, next generation equipment and availability of spare timeslots on channel banks. Further Sprint shall make available, where technically feasible, alternative service options to provide services by the requested due date, including but not limited to Resale services at UNE rates or spare channels on a digital DS1. Such alternatives shall be subject to joint KMC-Sprint technical discussion and review. Following such review, KMC will make the final decision to proceed with a service provisioning alternative.

24. MODIFICATIONS TO SPRINT'S EXISTING NETWORK

24.1. Modifications to Unbundled Loop and Dedicated Transport Facilities

24.1.1. Sprint will make routine network modifications to unbundled loop facilities used by KMC where the requested loop facility has already been constructed. Sprint will perform routine network modifications to unbundled loop facilities in a nondiscriminatory fashion, without regard to whether the loop facility being accessed was constructed on behalf, or in accordance with the specifications, of any carrier. Sprint will recover the cost of such routine network modifications to unbundled loop facilities to in its monthly recurring rates for unbundled loop.

24.1.1.1. In the case of unbundled loop facilities, a routine network modification is an activity that Sprint regularly undertakes for its own customers. Routine network modifications may include, but are not limited to, rearranging or splicing of cable; adding an equipment case; adding a doubler or repeater; adding a smart jack; installing a repeater shelf; adding a line card; deploying a new multiplexer or reconfiguring an existing multiplexer; and attaching electronic and other equipment that Sprint ordinarily attaches to a DS1 Loop to activate such loop for its own customer. Routine network modifications may also include

activities needed to enable KMC to obtain access to a Dark Fiber Loop. Routine network modifications may entail activities such as accessing manholes, deploying bucket trucks to reach aerial cable, and installing equipment casings. Routine network modifications do not include the construction of new loop facilities or the installation of new aerial or buried cable for KMC.

24.1.2. Sprint will make routine network modifications to unbundled dedicated transport facilities used by KMC where the requested Dedicated Transport facilities have already been constructed. Sprint will perform the routine network modifications to unbundled Dedicated Transport facilities in a nondiscriminatory fashion, without regard to whether the facility being accessed was constructed on behalf, or in accordance with the specifications, of any carrier. . Sprint will recover the cost of such routine network modifications to unbundled Dedicated Transport facilities in its monthly recurring rates for the unbundled Dedicated Transport.

24.1.2.1. In the case of unbundled Dedicated Transport facilities, a routine network modification is an activity that Sprint regularly undertakes for its own customers. Routine network modifications may include, but are not limited to, rearranging or splicing of cable; adding an equipment case; adding a doubler or repeater; installing a repeater shelf; and deploying a new multiplexer or reconfiguring an existing multiplexer. Routine network modifications also include activities needed to enable KMC to light a Dark Fiber transport facility. Routine network modifications may entail activities such as accessing manholes, deploying bucket trucks to reach aerial cable, and installing equipment casings. Routine network modifications do not include the installation of new aerial or buried cable for KMC.

24.1.2.2. Sprint shall not engineer the transmission capabilities of its network in a manner, or engage in any policy, practice, or procedure, that disrupts or degrades access to a local loop or subloop, including the time division multiplexing-based features, functions, and capabilities of a hybrid loop, for which KMC may obtain or has obtained access.

24.2. Loop Conditioning

24.2.1. Line conditioning is defined as the removal from a copper loop or copper subloop of any device that could diminish the capability of the loop or subloop to deliver high-speed switched wireline telecommunications capability, including digital subscriber line service. Such devices include, but are not limited to, bridge taps, load coils, low pass filters, and range extenders.

24.2.2. Conditioned loops are loops from which excessive bridge taps, load coils, low-pass filters, range extenders, and similar devices have been removed to enable the delivery of high-speed switched wireline telecommunications capability, including DSL. Sprint will condition loops at KMC's request.

24.2.3. Sprint shall recover the costs of line conditioning from KMC in accordance with the Commission's forward-looking pricing principles promulgated pursuant to section 252(d)(1) of the Act and in compliance with rules governing nonrecurring costs in § 51.507(e).

24.2.4. Sprint recommends that KMC utilize the Loop Make-Up process in Section 19 prior to submitting orders for loops intended for advanced services. However, a Loop Make-Up request is not required.

24.2.5. Sprint shall condition a Copper Loop at the request of KMC when KMC is seeking access to a Copper Loop, the high frequency portion of a Copper Loop, or a Copper Subloop to ensure that the Copper Loop or Copper Subloop is suitable for providing digital subscriber line services, including those provided over the high frequency portion of the Copper Loop or Copper Subloop, whether or Sprint offers advanced services to the end-user customer on that Copper Loop or Copper Subloop.

24.2.6. If Sprint seeks compensation from KMC for line conditioning, KMC has the option of refusing, in whole or in part, to have the line conditioned; and KMC's refusal of some or all aspects of line conditioning will not diminish any right it may have, under the Applicable Law to access the Copper Loop, the high frequency portion of the Copper Loop, or the Copper Subloop.

24.2.7. Insofar as it is technically feasible, Sprint shall test and report troubles for all the features, functions, and capabilities of conditioned copper lines, and may not restrict its testing to voice transmission only.

24.2.8. Where KMC is seeking access to the high frequency portion of a copper loop or copper subloop and Sprint claims that conditioning that loop or subloop will significantly degrade, as defined in § 51.233, the voiceband services that the incumbent LEC is currently providing over that loop or subloop, SPrint must either:

24.2.8.1. Locate another copper loop or copper subloop that has been or can be conditioned, migrate the incumbent LEC's voiceband service to that loop or subloop, and provide the requesting telecommunications carrier with access to the high frequency portion of that alternative loop or subloop; or

24.2.8.2. Make a showing to Commission that the original copper loop or copper subloop cannot be conditioned without significantly degrading voiceband services on that loop or

subloop, as defined in § 51.233, and that there is no adjacent or alternative copper loop or copper subloop available that can be conditioned or to which the end-user customer's voiceband service can be moved to enable line sharing.

24.2.8.3. If, after evaluating Sprint's showing under this section, the Commission concludes that a copper loop or copper subloop cannot be conditioned without significantly degrading the voiceband service, Sprint cannot then or subsequently condition that loop or subloop to provide advanced services to its own customers without first making available to KMC the high frequency portion of the newly conditioned loop or subloop.

Add the following new Part:

25. LINE SHARING

25.1. General Terms

25.1.1. Sprint shall make available the HFPL for line sharing by KMC pursuant to the following terms and conditions.

25.1.1.1. Grandfathered HFPL. For HFPLs that are in service prior to October 2, 2003, Sprint will offer HFPL at the rate effective on October 2, 2003 as long as that HFPL remains in service to the particular KMC end-user.

25.1.1.2. KMC may purchase additional HFPL from October 2, 2003 to October 1, 2004. Sprint will not provide access to additional HFPL after October 1, 2004.

25.1.1.3. For the HFPL ordered October 2, 2003 to October 1, 2004, the price for HFPL portion of the Loop will be 25% of the applicable UNE Loop rate for October 2, 2003 through October 1, 2004.

25.1.1.4. For HFPL ordered October 2, 2003 to October 1, 2004, the price for HFPL will be 50% of the applicable UNE Loop rate for October 2, 2004 through October 1, 2005.

25.1.1.5. For HFPL ordered October 2, 2003 to October 1, 2004, the price for HFPL will be 75% of the applicable UNE Loop rate for October 2, 2005 through October 1, 2006. After October 1, 2006, KMC must order a stand-alone loop or negotiate a line splitting arrangement with another Telecommunications Carrier.

25.1.2. Sprint shall provide access to the HFPL at its central office locations and

at any accessible terminal in the outside copper loop plant, subject to KMC having an effective collocation agreement and the availability of space.

25.1.3. Sprint shall make the HFPL available to KMC in only those instances when Sprint is the provider of analog circuit-switched voice band service on that same copper loop to the same End User.

25.1.3.1. Sprint will not provide HFPL where copper facilities do not exist.

25.1.3.2. When requested, Sprint will move an end user's analog circuit switched voice band service from digital loop carrier derived service to spare copper facilities, if available, via the non-recurring charges listed in Table One at KMC's expense.

25.1.4. Reverse ADSL Loops. If a KMC's ADSL Transmission Unit (including those integrated into DSLAMs) is attached to Sprint's Network and if an ADSL copper loop should start at an outside location, and is looped through a host or remote, and then to the end user, the copper plant from the outside location to the Sprint host or remote central office must be a facility dedicated to ADSL transmission only and not part of Sprint's regular feeder or distribution plant.

25.1.5. In the event that the end user being served by KMC via HFPL terminates its Sprint-provided retail voice service, or when Sprint provided retail voice service is disconnected due to "denial for non-pay", Sprint shall provide reasonable notice to KMC prior to disconnect. KMC shall have the option of purchasing an entire stand-alone UNE digital loop if it wishes to continue to provide advanced services to that end user. If KMC notifies Sprint that it chooses this option, KMC and Sprint shall cooperate to transition DSL service from the HFPL to the stand-alone loop without any interruption of service pursuant to the provisions set forth below. If KMC declines to purchase the entire stand alone UNE digital loop, Sprint may terminate the HFPL.

25.1.6. Sprint will use reasonable efforts to accommodate the continued use by KMC as a stand-alone UNE digital loop of the copper loop facilities over which KMC is provisioning advanced services at the time that the Sprint-provided retail voice service terminates; provided that:

25.1.6.1. adequate facilities are available to allow the provisioning of voice service over such other facilities, and

25.1.6.2. KMC agrees to pay any additional ordering charges associated with the conversion from the provisioning of HFPL to a stand alone unbundled digital loop as specified in Table One (excluding conditioning charges).

25.1.7. If other such facilities do not exist and the End User being served by KMC via HFPL has its Sprint-provided retail voice service terminated and another carrier ("Voice KMC") seeks to purchase the copper loop facilities (either as resale or a UNE) over which KMC is provisioning advanced services at the time that the Sprint-provided retail voice service terminates, Sprint will continue to allow the provision of advanced services by KMC over the copper facilities as an entire stand-alone UNE digital loop until such time as the Voice KMC certifies to Sprint that the End User has chosen the Voice KMC for the provision of voice service over the existing facilities. Sprint will provide reasonable notice to KMC prior to disconnection.

25.2. Information to be Provided

25.2.1. In connection with the provision of HFPL, Sprint shall provide to KMC the information specified in Section 8.8.

25.2.2. In connection with the provision of HFPL, KMC shall provide to Sprint the information specified in Section 8.8.

25.2.3. In connection with the provision of HFPL, if KMC relies on a calculation-based approach to support deployment of a particular technology, it must provide Sprint with information on the speed and power at which the signal will be transmitted.

25.3. Conditioning, Testing, Maintenance

25.3.1. Sprint will condition HFPL in accordance with Section 0. Sprint will not condition the loop if such activity significantly degrades the quality of the analog circuit-switched voice band service on the loop.

25.3.2. If Sprint declines a KMC request to condition a loop and Sprint is unable to satisfy KMC of the reasonableness of Sprint's justification for such refusal, Sprint must make a showing to the Commission that conditioning the specific loop in question will significantly degrade voiceband services.

25.3.3. At the installation of retail voice service, and in response to reported trouble, Sprint will perform basic testing (simple metallic measurements) by accessing the loop through the voice switch. Sprint expects the KMC to deploy the testing capability for its own specialized services. If KMC requests testing other than basic installation testing as indicated above, Sprint and KMC will negotiate terms and charges for such testing.

25.3.4. Any additional maintenance of service conducted at KMC's request by Sprint on behalf of the KMC solely for the benefit of the KMC's services will be paid for by KMC at prices negotiated by Sprint and KMC.

25.4. Deployment and Interference

25.4.1. In providing services utilizing the HFPL, Sprint shall allow KMC to deploy underlying technology that does not significantly interfere with other advanced services and analog circuit-switched voice band transmissions.

25.4.2. Sprint shall employ industry accepted standards and practices to maximize binder group efficiency through analyzing the interference potential of each loop in a binder group, assigning an aggregate interference limit to the binder group, and then adding loops to the binder group until that limit is met. Disputes regarding the standards and practices employed in this regard shall be resolved through the Dispute Resolution Process set forth in Part B of this Agreement.

25.4.3. Until long term industry standards and practices can be established, a particular technology using the high frequency portion of the loop shall be presumed acceptable for deployment under certain circumstances. Deployment that is consistent with at least one of the following circumstances presumes that such loop technology will not significantly degrade the performance of other advanced services or impair traditional analog circuit-switched voice band services:

25.4.3.1. Complies with existing industry standards, including an industry-standard PSD mask, as well as modulation schemes and electrical characteristics;

25.4.3.2. Is approved by an industry standards body, the FCC, or any state commission, or;

25.4.3.3. Has been successfully deployed by any KMC without significantly degrading the performance of other services; provided however, where KMC seeks to establish that deployment of a technology falls within the presumption of acceptability under this paragraph, the burden is on KMC to demonstrate to the Commission that its proposed deployment meets the threshold for a presumption of acceptability and will not, in fact, significantly degrade the performance of other advanced services or traditional voice band services.

25.5. If a deployed technology significantly degrades traditional analog circuit-switched voice band services, Sprint will notify the KMC and give them a reasonable opportunity to correct the problem. KMC will immediately stop any new deployment until the problem is resolved to mitigate disruption of Sprint and other carrier services. If Sprint and the KMC are unable to resolve the problem, they will present factual evidence to the Commission for review and determination. If the Commission determines that the KMC's technology is the cause of the interference, the KMC will remedy the problem by reducing the

number of existing customers utilizing the technology or by migrating them to another technology that does not disturb.

25.6. If a deployed technology significantly degrades other advanced services, the affected Party will notify the interfering party and give them a reasonable opportunity to correct the problem. The interfering Party will immediately stop any new deployment until the problem is resolved to mitigate disruption of other carrier services. If the affected parties are unable to resolve the problem, they will present factual evidence to the Commission for review and determination. If the Commission determines that the deployed technology is the cause of the interference, the deploying party will remedy the problem by reducing the number of existing customers utilizing the technology or by migrating them to another technology that does not disturb.

25.7. When the only degraded service itself is a known disturber and the newly deployed technology is presumed acceptable, the degraded service shall not prevail against the newly deployed technology.

25.8. If Sprint denies a request by KMC to deploy a technology, it will provide detailed, specific information providing the reasons for the rejection.

26. FORECAST

26.1. KMC will provide monthly forecast information to Sprint updated quarterly on a rolling twelve-month basis for requests for analog Loops (including Subloops), digital Loops (including Subloops), and HFPL. An initial forecast meeting should be held soon after the first implementation meeting. A forecast should be provided at or prior to the first implementation meeting. The forecasts shall project the gain/loss of shared lines on a monthly basis by Sprint wire center and shall include a description of any major network projects planned by KMC that will affect the demand. Forecast information shall be subject to the confidentiality provisions of this Agreement. Forecast information will be used solely for network planning and operations planning and shall not be disclosed within Sprint except as required for such purposes. Under no circumstances shall KMC specific forecast information be disclosed to Sprint's retail organization (excluding solely those operational personnel engaged in network and operations planning), product planning, sales or marketing.

26.2. Upon request of either Party, the Parties shall meet to review their forecasts going forward if forecasts vary significantly from actual results.

26.3. Each Party shall provide a specified point of contact for planning purposes.

27. INDEMNIFICATION

27.1. Each Party, whether a KMC or Sprint, agrees that should it cause any non-standard DSL technologies to be deployed or used in connection with or on Sprint facilities, that Party will pay all costs associated with any damage, service

interruption or other telecommunications service degradation, or damage to the other Party's facilities.

27.2. For any technology, KMC represents that its use of any Sprint network element, or of its own equipment or facilities in conjunction with any Sprint network element, will not materially interfere with or impair service over any facilities of Sprint, its affiliated companies or connecting and concurring carriers, cause damage to Sprint's plant, impair the privacy of any communications carried over Sprint's facilities or create hazards to employees or the public. Upon reasonable written notice and after a reasonable opportunity to cure, Sprint may discontinue or refuse service if KMC violates this provision, provided that such termination of service will be limited to KMC's use of the element(s) causing the violation. Sprint will not disconnect the elements causing the violation if, after receipt of written notice and opportunity to cure, KMC demonstrates that their use of the network element is not the cause of the network harm.

Add the following new Part:

28. CALL-RELATED DATABASES

28.1. Sprint will offer access to call-related databases, including, but not limited to, the Line Information database (LIDB), Toll Free Calling database, Number Portability database, Calling Name (CNAM) database, Advanced Intelligent Network (AIN) databases, and the AIN platform. Sprint reserves the right to decline to offer access to certain AIN software that qualifies for proprietary treatment.

28.2. Line Information Database (LIDB)

28.2.1. The LIDB is a transaction-oriented database that contains records associated with subscribers' Line Numbers and Special Billing Numbers. LIDB accepts queries in conjunction with unbundled local switching and provides appropriate responses. The query originator need not be the owner of LIDB data. LIDB queries include functions such as screening billed numbers to determine if the end user associated with the number has requested deny Collect or deny Third Number Billing call restrictions or whether a telephone line number based non-proprietary calling card has a valid Personal Identification Number (PIN).

28.2.2. Technical Requirements

28.2.2.1. Prior to the availability of Local Number Portability, Sprint shall enable KMC to store in Sprint's LIDB any subscriber Line Number of Special Billing Number record, whether ported or not, for which the NPA-NXX or NXX-01-XX Group is supported by that LIDB, and NPA-NXX and NXX-0/1XX Group Records, belonging to a NPA-NXX or NXX-0/1XX owned by KMC.

28.2.2.2. Subsequent to the availability of a long-term solution for Number Portability, Sprint, under the terms of a separate agreement with KMC, shall enable KMC to store in Sprint's LIDB any subscriber Line Number or Special Billing Number record, whether ported or not, regardless of the number's NPA-NXX or NXX-0/1XX.

28.2.2.3. Sprint shall perform the following LIDB functions for KMC's subscriber records in LIDB: Billed Number Screening (provides information such as whether the Billed Number may accept Collect or Third Number Billing calls); and Calling Card Validation.

28.2.2.4. Sprint shall process KMC's subscribers' records into LIDB at Parity with Sprint subscriber records. With respect to other LIDB functions Sprint shall indicate to KMC what additional functions (if any) are performed by LIDB in their network.

28.2.2.5. Sprint shall perform backup and recovery of all of KMC's data in LIDB at Parity with backup and recovery of all other records in the LIDB, including sending to LIDB all changes made since the date of the most recent backup copy.

28.2.3. Compensation and Billing

28.2.3.1. Access by KMC to LIDB information in Sprint's LIDB Database - KMC shall pay a per query charge as detailed in Sprint's applicable tariff or published price list.

28.2.3.2. Access to Other Companies' LIDB Database - Access to other companies' LIDB shall be provided at a per query rate established for hubbing of $0.0035 and a rate for LIDB queries and switching of $0.065 for a combined rate of $0.0685.

28.2.4. Authorized Uses of Sprint's LIDB Database - Use of Sprint's LIDB Database by KMC and KMC's customers is limited to obtaining LIDB responses and using the information contained in those responses only on a call by call basis and only to support service related to a call in progress. KMC will not capture, cache, or store any information contained in a LIDB response. KMC will prohibit in its tariff or contracts with its customers or other third parties the capture, caching or storage of LIDB response information and passing of any information obtained from a LIDB query response on to any third party.

28.3. Calling Name Database (CNAM)

28.3.1. The CNAM database is a transaction-oriented database accessible via

the CCS network. It contains records associated with subscribers' Line Numbers and Names. CNAM accepts queries from other Network Elements and provides the calling name. The query originator need not be the owner of CNAM data. CNAM provides the calling parties' name to be delivered and displayed to the terminating caller with 'Caller ID with Name'.

28.3.2. Technical Requirements

28.3.2.1. Storage of KMC Caller Names in the Sprint CNAM Database is available under the terms of a separate contract.

28.3.2.2. Sprint shall provide access to Sprint CNAM database for purpose of receiving and responding to CNAM Service Queries.

28.3.3. Compensation and Billing

28.3.3.1. Access by KMC to CNAM information in Sprint's CNAM Database - KMC shall pay a per query charge as detailed in Sprint's applicable tariff or published price list.

28.3.3.2. Access to Other Companies' CNAM Database - Access to other companies CNAM shall be provided at a per query rate established for hubbing of $0.0035 and a rate for CNAM queries and switching of $0.016 for a combined rate of $0.0195.

28.3.4. Authorized Uses of Sprint's CNAM Database - Use of Sprint's CNAM Database by KMC and KMC's customers is limited to obtaining CNAM responses and using the information contained in those responses only on a call by call basis and only to support service related to a call in progress. KMC will not capture, cache, or store any information contained in a CNAM response. KMC agrees to prohibit via its tariff or contracts with its customers or other third parties the capture, caching or storage of CNAM response information and the passing or resale of any information obtained from a CNAM query response on to any third party.

28.4. Toll Free Number Database

28.4.1. The Toll Free Number Database provides functionality necessary for toll free (e.g., 800 and 888) number services by providing routing information and additional vertical features (i.e., time of day routing by location, by carrier and routing to multiple geographic locations) during call setup in response to queries from KMC's switch. The Toll Free records stored in Sprint's database are downloaded from the SMS/800. Sprint shall provide the Toll Free Number Database in accordance with the following:

28.4.1.1. Technical Requirements

28.4.1.1.1. The Toll Free Number Database shall return IXC identification and, where applicable, the queried toll free number, translated numbers and instructions as it would in response to a query from a Sprint switch.

28.4.2. Compensation and Billing

28.4.2.1. Access by KMC to the Toll Free Number Database Information - KMC shall pay a per query charge as detailed in Sprint's applicable tariff or published price list.

28.4.3. Authorized Uses of Sprint's Toll Free Database - Use of Sprint's Toll Free Database by KMC and its customers is limited to obtaining information, on a call-by-call basis, for proper routing of calls in the provision of toll free exchange access service or local toll free service.

28.5. Local Number Portability Local Routing Query Service

28.5.1. TCAP messages originated by KMC's SSPs and received by Sprint's database will be provided a response upon completion of a database lookup to determine the LRN. This information will be populated in industry standard format and returned to KMC so that it can then terminate the call in progress to the telephone number now residing in the switch designated by the LRN. Sprint shall provide the LNP Query Service in accordance with the following:

28.5.1.1. Technical Requirements

28.5.1.1.1. KMC agrees to obtain, prior to the initiation of any query or other service under this Agreement, a NPAC/SMS User Agreement with Lockheed. KMC will maintain the NPAC/SMS User Agreement with Lockheed, or its successor, as long as it continues to make LNP queries to the Sprint database. Failure to obtain and maintain the NPAC/SMS User Agreement is considered a breach of this Agreement and is cause for immediate termination of service. Sprint shall not be liable for any direct or consequential damages due to termination because of lack of a NPAC/SMS User Agreement.

28.5.1.1.2. First Usage Notification - Sprint will provide KMC with notification of the first ported number order processed in each NPA/NXX

eligible for porting. This shall be provided via E-mail to KMC's designee on a mutually agreeable basis.

28.5.2. Compensation and Billing

28.5.2.1. Access by KMC to the LNP Database information -- KMC shall pay a per query charge as detailed in Sprint's applicable tariff or published price list.

28.5.2.2. NPAC Costs - Sprint's LNP Database service offering does not include the cost of any charges or assessments by Number Portability Administrative Centers, whether under the NPAC/SMS User Agreement with Lockheed, or otherwise, or any charges assessed directly against KMC as the result of the FCC LNP Orders or otherwise by any third-party. These costs include the costs assessed against telecommunications carriers to pay for NPAC functions as permitted by the FCC and applicable legal or regulatory bodies. Sprint shall have no liability to KMC or the NPAC for any of these fees or charges applicable to KMC, even though it may pay such charges for other Sprint companies.

Add to Part F of Agreement:

29. SIGNALING NETWORK INTERCONNECTION

29.1.1. Definition

29.1.1.1. SS7 Network Interconnection is the interconnection of KMC local Signaling Transfer Point ("STPs") with Sprint STPs. This interconnection provides connectivity that enables the exchange of SS7 messages among Sprint switching systems and databases ("DBs"), KMC local or tandem switching systems, and other third party switching systems directly connected to the Sprint SS7 network.

29.1.1.2. Technical Requirements

29.1.1.2.1. SS7 Network Interconnection shall provide signaling connectivity to all components of the Sprint SS7 network. These include:

29.1.1.2.1.1. Sprint local or tandem switching systems;

29.1.1.2.1.2. Sprint SCP databases; and

29.1.1.2.1.3. Other third party local or tandem switching systems.

29.1.1.3. The connectivity provided by SS7 Network Interconnection shall fully support the functions of Sprint switching systems and databases and KMC or other third party switching systems that are connected with A-link access to the Sprint SS7 network.

29.1.1.4. If traffic is routed based on dialed or translated digits between an KMC Local Switching system and a Sprint or other third party Local Switching system, either directly or via a Sprint tandem switching system, then, at Parity to itself and where available, that the Sprint SS7 network shall convey via SS7 Network Interconnection the TCAP messages that are necessary to provide Call Management services (Automatic Callback, Automatic Recall, and Screening List Editing) between the KMC local STPs and the Sprint or other third party local Switch. TCAP messages will be exchanged on a bill and keep basis.

29.1.1.5. When the capability to route messages based on Intermediate Signaling Network Identifier ("ISNI") is generally available on Sprint STPs, the Sprint SS7 Network shall also convey TCAP messages using SS7 Network Interconnection in similar circumstances where the Sprint Switch routes traffic based on a Carrier Identification Code ("CIC").

29.1.1.6. SS7 Network Interconnection shall provide all functions of the MTP as specified in ANSI T1. 111 (Reference 12.5.2). This includes:

29.1.1.6.1. Signaling Data Link functions, as specified in ANSI T1.111.2;

29.1.1.6.2. Signaling Link functions, as specified in ANSI T1.111.3; and

29.1.1.7. Signaling Network Management functions, as specified in ANSI T1.111.4.

29.1.1.8. SS7 Network Interconnection shall provide all functions of the SCCP necessary for Class 0 (basic connectionless) service, as specified in ANSl T1.112 (Reference 12.5.4). In particular, this includes Global Title Translation ("GTT") and SCCP Management procedures, as specified in T1.112.4. Where the destination signaling point is a Sprint switching system or DB, or is another third party local or tandem switching system directly connected to the Sprint SS7 network, SS7 Network Interconnection shall include final GTT of messages to the destination and SCCP Subsystem Management of the destination. Where the destination signaling point is an KMC local or tandem switching system, SS7 Network Interconnection shall include intermediate GTT of messages to a Gateway pair of KMC local STPs, and shall not include SCCP Subsystem Management of the destination.

29.1.2. SS7 Network Interconnection shall provide all functions of the Integrated

Services Digital Network User Part ("ISDNUP"), as specified in ANSI T1.113.

29.1.3. SS7 Network Interconnection shall provide all functions of the TCAP, as specified in ANSI T1.114.

29.1.4. If and when Internetwork MTP Routing Verification Test ("MRVT") and SCCP Routing Verification Test ("SRVT") become approved ANSI standards and available capabilities of Sprint STPs, SS7 Network Interconnection shall provide these functions of the OMAP.

29.1.5. Sprint shall offer the following SS7 Network Interconnection options to connect KMC or KMC-designated STPs to the Sprint SS7 network:

29.1.5.1. A-link interface from KMC local or tandem switching systems; and

29.1.5.2. B-link interface from KMC STPs.

29.1.6. The Signaling Point of Interconnection ("SPOI") for each link shall be located at a cross-connect element, including, but not limited to, a DSX-1, in the Central Office ("CO") where the Sprint STPs is located. There shall be a DS1 or higher rate transport interface at each of the SPOIs. Each signaling link shall appear as a DS0 channel within the DS1 or higher rate interface. Sprint shall offer higher rate DS1 signaling links for interconnecting KMC Local Switching systems or STPs with Sprint STPs as soon as these become approved ANSI standards and available capabilities of Sprint STPs. Sprint and KMC shall work jointly to establish mutually acceptable SPOI.

29.1.7. Where physical diversity is available, the Sprint CO shall provide intraoffice diversity between the SPOIs and the Sprint STPs, so that no single failure of intraoffice facilities or equipment shall cause the failure of both B or D-links in a layer connecting to a Sprint STPs.

29.1.8. Sprint shall set message screening parameters to accept messages at KMC's instructions from KMC local or tandem switching systems destined to any signaling point in the Sprint SS7 network with which the KMC switching system has a legitimate signaling relation.

29.1.9. SS7 Network Interconnection shall be equal to or better than all of the requirements for SS7 Network Interconnection set forth in the following technical references:

29.1.10. Signaling Link transport shall consist of full duplex mode 56 Kbps transmission paths.

29.1.11. Of the various options available, Signaling Link Transport shall perform in the following two ways:

29.1.11.1. As an "A-link" which is a connection between a Switch or SCP and a home Signaling Transfer Point Switch ("STPs") pair; and

29.1.11.2. As a "D-link" which is a connection between two (2) STPs pairs in different company networks (*e.g.*, between two STPs pairs for two (2) Competitive Local Exchange Carriers ("CLECs")).

29.1.12. Signaling Link Transport shall consist of one (1) or more signaling link layers as follows:

29.1.12.1. An A-link layer shall consist of two (2) links.

29.1.12.2. A B or D-link layer shall consist of four (4) links.

29.1.12.3. A signaling link layer shall satisfy a performance objective such that:

29.1.12.3.1. There shall be no more than two minutes down time per year for an A-link layer; and

29.1.12.3.2. There shall be negligible (less than 2 seconds) down time per year for a B-link layer.

29.1.12.4. A signaling link layer shall satisfy interoffice and intraoffice diversity of facilities and equipment, such that:

29.1.12.4.1. No single failure of facilities or equipment causes the failure of both links in an A-link layer (*i.e.*, the links should be provided on a minimum of two (2) separate physical paths end-to-end); and

29.1.12.4.2. Where available and to the greatest extent possible, no two (2) concurrent failures of facilities or equipment shall cause the failure of all four (4) links in a D-link layer (*i.e.*, the links should be provided on a minimum of three (3) separate physical paths end-to-end).

29.1.12.5. Interface Requirements

29.1.12.5.1. There shall be a DS1 (1.544 Mbps) interface at the KMC-designated SPOIs. Each 56 Kbps transmission path shall appear as a DS0 channel within the DS1 interface.

29.1.13. Signaling Transfer Points (STPs)

29.1.13.1. Definition

29.1.13.1.1. Signaling Transfer Points (STPs) is a signaling network function that includes all of the capabilities provided by the signaling transfer point

switches (STPs) and their associated signaling links which enable the exchange of SS7 messages among and between switching elements, database elements and signaling transfer points.

29.1.13.2. Technical Requirements.

29.1.13.3. STPs shall provide access to and fully support the functions of all other Network Elements connected to the Sprint SS7 network. These include:

29.1.13.3.1. Sprint Local Switching or Tandem Switching;

29.1.13.3.2. Sprint Service Control Points/Databases;

29.1.13.3.3. Third-party local or Tandem Switching systems; and

29.1.13.3.4. Third party provides STPs.

29.1.13.4. The connectivity provided by STPs shall fully support the functions of all other Network Elements connected to Sprint's SS7 network. This explicitly includes the use of Sprint's SS7 network to convey messages which either originate or terminate at a signaling end point directly connected to the Sprint SS7 network or which are originated or terminated to a signaling point within the KMC network in conjunction with Sprint's provision of tandem switching to KMC (*i.e.*, transit messages). When the Sprint SS7 network is used to convey transit messages, there shall be no alteration of the Integrated Services Digital Network User Part ("ISDNUP") or Transaction Capabilities Application Part ("TCAP") user data that constitutes the content of the message.

29.1.13.5. If a Sprint tandem Switch routes calling traffic, based on dialed or translated digits, on SS7 trunks between an KMC local Switch and third party local Switch, Sprint's SS7 network shall convey the TCAP messages that are necessary to provide Call Management features (Automatic Callback, Automatic Recall, and Screening List Editing) between the KMC local STPs and the STPs that provide connectivity with the third party local Switch, even if the third party local Switch is not directly connected to Sprint's STPs.

29.1.13.6. STPs shall provide all functions of the MTP as specified in Telcordia (formerly Bellcore) ANSI Interconnection Requirements. This includes:

29.1.13.6.1. Signaling Data Link functions, as specified in ANSI T1.111.2;

29.1.13.6.2. Signaling Link functions, as specified in ANSI T1.111.3; and

29.1.13.6.3. Signaling Network Management functions, as specified in ANSI T1.111.4.

29.1.13.7. STPs shall provide all functions of the SCCP necessary for Class 0 (basic connectionless) service, as specified in ANSI T1.112 (Reference 12.5.4). In particular, this includes Global Title Translation ("GTT") and SCCP Management procedures, as specified in T1.112.4.

29.1.13.8. In cases where the destination signaling point is a Sprint local or tandem switching system or database, or is an KMC or third party local or tandem switching system directly connected to Sprint's SS7 network, Sprint STPs shall perform final GTT of messages to the destination and SCCP Subsystem Management of the destination. In all other cases, STPs shall perform intermediate GTT of messages to a Gateway pair of STPs in an SS7 network connected with the Sprint SS7

network, and shall not perform SCCP Subsystem Management of the destination.

29.1.13.9. STPs shall also provide the capability to route SCCP messages based on ISNI, as specified in ANSI T1.118 (Reference 12.5.7), when this capability becomes available on Sprint STPs.

29.1.13.10. Where available in both Parties' networks, STPs shall provide all functions of the OMAP commonly provided by STPs, as specified in the reference in subsection 12.5.6. All OMAP functions will be on a "where available" basis and can include:

29.1.13.10.1. MTP Routing Verification Test ("MRVT"); and

29.1.13.10.2. SCCP Routing Verification Test ("SRVT").

29.1.13.11. In cases where the destination signaling point is a Sprint local or tandem switching system or database, or is a KMC or third party local or tandem switching system directly connected to the Sprint SS7 network, STPs shall perform MRVT and SRVT to the destination signaling point. In all other cases, STPs shall perform MRVT and SRVT to a Gateway pair of STPs in an SS7 network connected with the Sprint SS7 network. This requirement shall be superseded by the specifications for Internetwork MRVT and SRVT if and when these become approved ANSI standards and available capabilities of Sprint STPs.

29.1.13.12. STPs shall be on parity with Sprint and shall be equal to or better than the following Performance requirements:

29.1.13.12.1. MTP Performance, as specified in ANSI T1.111.6; and

29.1.13.12.2. SCCP Performance, as specified in ANSI T1.112.5.

29.1.13.13. Interface Requirements.

29.1.13.13.1. Sprint shall provide the following STP options to connect KMC or KMC-designated local switching systems or STPs to the Sprint SS7 network:

29.1.13.13.1.1.1. An A-link interface from CLEC local switching systems; and

29.1.13.13.1.1.2. B- or D-link interface from CLEC STPs.

29.1.13.13.1.2. Each type of interface shall be provided by one or more sets (layers) of signaling links, as follows:

29.1.13.13.1.2.1. An A-link layer shall consist of two (2) links,

29.1.13.13.1.2.2. A B- or D-link layer shall consist of four (4) links,

29.1.13.13.1.2.3. Signaling Point of Interconnection (SPOI) for each link shall be located at a cross-connect element, such as a DSX-1, in the Central Office (CO) where the Sprint STPs is located. There shall be a DS1 or higher rate transport interface at each of the SPOIs. Each signaling link shall appear as a DS0 channel within the DS1 or higher rate interface. Sprint shall offer higher rate DS1 signaling for interconnecting KMC Local Switching systems or STPs with Sprint STPs as soon as these become approved ANSI standards and available capabilities of Sprint STPs. Sprint and KMC will work jointly to establish mutually acceptable SPOIs.

29.1.13.13.1.3. Where available and to the extent possible, Sprint shall provide MTP and SCCP protocol interfaces that shall conform to all Sections relevant to the MTP or SCCP in the following specifications:

29.1.13.13.1.3.1. Telcordia (formerly Bellcore) GR-905-CORE, Common Channel Signaling Network Interface Specification ("CCSNIS") Supporting Network Interconnection, Message Transfer Part ("MTP"), and Integrated Services Digital Network User Part ("ISDNUP"); and

29.1.13.13.1.3.2. Telcordia (formerly Bellcore) GR-1432-CORE, CCS Network Interface Specification ("CCSNIS") Supporting Signaling Connection Control Part ("SCCP") and Transaction Capabilities Application Part ("TCAP").

29.1.13.14.Message Screening

29.1.13.14.1. Sprint shall set message screening parameters so as to accept valid messages from KMC local or tandem switching systems destined to any signaling point in the Sprint SS7 network with which the KMC switching system has a legitimate signaling relation.

29.1.13.14.2. Sprint shall set message screening parameters so as to accept valid messages from KMC local or tandem switching systems destined to any signaling point or network interconnected to the Sprint SS7 network with which the KMC switching system has a legitimate signaling relation.

29.1.13.14.3. Sprint shall set message screening parameters so as to accept valid messages destined to an KMC local or tandem switching system from any signaling point or network interconnected to the Sprint SS7 network with which the KMC switching system has a legitimate signaling relation.

29.1.13.14.4. Sprint shall set message screening parameters so as to accept and send messages destined to an KMC SCP from any signaling point or network interconnected to the Sprint SS7 network with which the KMC SCP has a legitimate signaling relation.

29.1.13.15.Sprint shall provide physical interconnection to SCPs through the SS7 network and protocols, as specified in Section 12 of this Attachment, with TCAP as the application layer protocol;

29.1.13.16.Sprint shall provide physical interconnection to databases via industry standard interfaces and protocols (*e.g.*, ISDN and X.25);

29.1.13.17.The reliability of interconnection options shall be consistent with requirements for diversity and survivability as specified in Section 12 of this Attachment (which applies to both SS7 and non-SS7 interfaces);

29.1.13.18.Database functionality shall be unavailable a maximum of thirty (30) minutes per year, both scheduled and unscheduled. Unavailability due to software and hardware upgrades shall be scheduled during minimal usage periods and only be undertaken upon advance notification to providers which might be impacted. Any downtime associated with the provision of call processing related databases will impact all service providers, including Sprint, equally.

29.1.13.19.Sprint shall provide Database provisioning consistent with the provisioning requirements of this Agreement (*e.g.*, data required, edits, acknowledgments, data format, transmission medium and notification of order completion);

29.1.13.20.The operational interface provided by Sprint shall complete Database transactions (*i.e.*, add, modify, delete) for KMC subscriber records stored in Sprint databases within twenty-four (24) hours, or sooner where Sprint provisions its own subscriber records within a shorter interval;

29.1.13.21.Sprint shall provide Database maintenance consistent with the maintenance requirements as specified in this Agreement (*e.g.*, notification of Sprint Network Affecting Events, testing, dispatch schedule and measurement and exception reports);

29.1.13.22.Sprint shall provide billing and recording information to track database usage consistent with connectivity billing and recording requirements as specified in this Agreement (*e.g.*, recorded message format and content, timeliness of feed, data format and transmission medium); and

29.1.13.23.Sprint shall provide SCPs/Databases in accordance with the physical security requirements specified in this Agreement.

TABLE ONE

Rates to be determined based on Commission approval of Sprint cost study conforming to the rates, terms, and conditions set forth here in.